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ABSTRACT

This Education and Work Program Year-End Report has been prepared by the Education and Work Program of the Northwest Regional Educational Laboratory (NWREL) to summarize their work performed under contract with the National Institute of Education. The report has been prepared for educational policy-makers, researchers, and educational practitioners. Section 2 of this report contains an overview of Education and Work Program accomplishments for the year. A summary of NWREL activities in fostering state strategies for experience-based career education (EBCE), a comprehensive alternative education program for secondary students, appears in section 3. Sections 4-6 describe adaptations of EBCE for migrant youth, gifted and talented junior high school students, and adults. Section 7 describes the research done in experiential learning and reports preliminary findings of a study investigating the factors that distinguish excellent from poor learning experiences at employer/community sites. (YLB)

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EDUCATION AND WORK PROGRAM YEAR-END REPORT

TECHNICAL SUMMARY OF FY79 ACTIVITIES AND EVALUATION FINDINGS

Submitted to the
National Institute of Education
of the
Department of Health, Education and Welfare

Prepared by
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Grant No. NIE-G-78-0206

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U S DEPARTMENT OF HEALTH,
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- Adaptation of proven experiential interventions with persons facing unusual transition and equity problems, e.g., disadvantaged youth, migrants, young women, mid-career adults, the gifted and talented
- Research to determine characteristics of successful experiential programs
- Development of manuals and handbooks to provide information to practitioners
- Strengthening career education practices at the local level by referring trained educational consultants
- Development of strategies to help practitioners make effective use of information about career education programs and practices
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This year-end report reflects the contribution of the staff of the Education and Work Program at NWREL and the cooperation of many practitioners who have participated in trying out innovations in education. The Overview of Education and Work Program Accomplishments chapter was written by Dr. Larry McClure, Program Director. The Status of EBCE State Strategy Activities was prepared by Nancy Anderson, while the Report on Interagency Migrant Adaptation was written by Humberto Reyna. The evaluation summaries of the EBCE programs for gifted and talented students and out-of-school adults were written by Dr. Sharon Owen. Typing credit for the report goes to Ann Rolander and Ken Jordan. The editing was performed by Sharon Streeter.

EXECUTIVE SUMMARY

Introduction

This report describes and summarizes findings of those activities funded by the National Institute of Education and conducted by the Northwest Regional Educational Laboratory (NWREL) Education and Work Program during the 1978-79 year. The report focuses on findings from: 1) state strategy activities associated with NWREL's Experience-Based Career Education (EBCE), 2) adaptations of EBCE for migrant youth, 3) adaptations of EBCE for gifted and talented junior high school students, 4) adaptations of EBCE for adults and 5) NWREL's experiential learning studies.

Description of EBCE

Experience-Based Career Education is "an operational expression of the conviction that a comprehensive curriculum exists outside the walls of the school. It assumes that the educational environment can be restructured to take maximum advantage of both the value of direct experience and the special capabilities of community institutions in helping young people prepare for adult responsibilities."*

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*Hagans, Rex W. "What is Experience-Based Career Education?" Illinois Career Education Journal, Spring, 1976, 33:6-10.

A primary goal of the EBCE program has been to integrate a student's exploration of various careers with the acquisition of cognitive, interpersonal and affective skills through a series of planned experiences with identified learning outcomes.* Individual students are encouraged to assume responsibility for their own learning.

Four characteristics, taken together, make EBCE different from other alternative or career education programs:

1. The learning program evolves from adult activities in the community. It is reasoned that learning activities based directly on adult tasks and roles in the community will be recognized as more relevant by young persons preparing for the transition to adulthood.
2. The program is based on experiential learning, actively involving students in the daily work of community life. This "hands-on" approach to learning, long recognized as an effective learning strategy, is an important feature of a comprehensive EBCE program.

*A 12-page program overview of EBCE is available by writing to Education and Work Program, NWREL, 710 S. W. Second Avenue, Portland, Oregon 97204. This overview describes what is unique about EBCE, what students learn, how they learn and how EBCE relates to the employers and the community.

3. The EBCE Curriculum is fully integrated. Salespersons do not break down sales presentations into isolated components of grammar, vocabulary or pyschology. Similarly, EBCE applies no artificial distinctions among the curricular disciplines.
4. EBCE is fully individualized. The learning goals and strategies are varied to meet the needs, interests and abilities of each student.

State Strategies

A summary of NWREL's three-year effort to establish EBCE networks in several states is presented here. An analysis of the different approaches used by separate states and the effectiveness of the networks is contained in a separate publication entitled "Making An Educational Innovation Stick: Building State Networks to Support Experience-Based Career Education."

Four states--Illinois, Nevada, Texas and Wyoming--selected NWREL as the primary Laboratory for offering EBCE technical assistance during the first round of NIE funding of states in 1976. The second round of selecting states for networking consisted of those receiving free technical and training assistance from NWREL but no direct funds from NIE. Colorado, Idaho and Oregon became NWREL's second round states. In addition, a grassroots EBCE network in Michigan grew without formal recognition or support from NIE. The documentation of NWREL activities in these states and a summary highlighting the approaches used in each state appear in Section III of this report.

Adaptation of EBCE for migrant youth

In 1978-79 NWREL attempted to help meet the needs of migrant youth by developing a secondary program built upon the characteristics and environment of migrants and to explore the development of a secondary educational delivery system that would be more consistent between school districts.

With a modest funding from NIE, NWREL began work in February, 1978 to disseminate EBCE for migrant student use. General mailings to all state migrant directors were sent, with information about EBCE, and some district directors who expressed an interest received telephone calls and personal visits.

These early efforts resulted in two pilot projects: the first in Mission, Texas and the second in Yakima, Washington. Staff in both projects had been specially trained and had experience working with migrant youth. It was felt that although migrant youth have unique problems due to their mobility and economic situations, EBCE would add new meaning to the educational process.

Decision-makers in the Texas and Washington pilot programs sought ways to blend migrant youths' needs in life skills, social development and career knowledge with real life experiences via hands-on activities wherever people were working and real work was going on. By providing migrant youth with these cumulative experiences in a variety of everyday work settings, the pilot tests sought to help migrant youth (a) know themselves better by refining their interests, abilities and values to develop realistic and obtainable career and life goals, (b) understand

that they have personal power and can have a control over their lives, (c) build the decision-making skills needed to put what they have learned together with what they want to do, (d) learn that basic skills in written and oral communications and mathematics are essential for accomplishing their career and personal goals, (e) gain a broad understanding of the world of work--its relevancies, rewards and shortcomings--by learning what they could expect from it and what it would require of them and (f) discover that the adult world is not simply an "establishment" but is made up of many different people with their own goals, values and personal characteristics.

The 1978-79 school year marks the first year of NWREL's pilot testing of the adaptation of the Experience-Based Career Education project with migrant students. The data contained in this report need to be regarded as preliminary since the Mission Texas project was in its very first year of operation and full year data are available on only eleven students.

Mission, Texas has been the first project to adapt Experience-Based Career Education to the needs of migrant youth.

The statements that follow summarize findings from the first-year evaluation of the Mission Texas Migrant EBCE program.

1. Mission Texas has initiated a high fidelity NWREL Experience-Based Career Education program designed to meet the needs of migrant youth. They have received training and technical assistance from NWREL to help implement their program.

2. Interviews with EBCE case study students indicate that they feel they have greater choice, are more involved and have more responsibility in EBCE than in their regular school program.
3. Students did not show a significant change in their attitudes toward the concepts of "me", "school", "work", "adults" or "learning" as measured by a semantic differential while in EBCE.
4. On the student End-of-Project Questionnaire in May, only two of 10 students indicated they had never observed or worked at one or two jobs they said they would like to hold after completing their education. At the beginning of the program 14 of the 17 students indicated they had never done so. Thus EBCE gave students a chance to observe or work in potential careers of interest that they otherwise would not have had the chance to do. About half of the EBCE students changed career preferences as a result of participation in EBCE. In May, however, three of the 11 students indicated they did not know where to begin in preparing for and entering a job they would most like to hold after graduation, six said they had some idea, but only two felt the steps were quite clear. This pattern was quite similar to that in October thus suggesting that students were exposed to various careers but not helped much in understanding how to prepare for a job of interest to them.

5. When asked to rate the overall quality of the EBCE program in May, nine students rated it excellent or good and two gave it an average rating. None rated it poor. Eight of 11 students felt more motivated to learn in EBCE than in the regular high school program and none felt less motivated to learn.
6. A basic skills objective of the Mission EBCE project was that students would do at least as well as comparison group students even though they spent up to half of their time in the community. Pre- and posttest data indicated that, although the comparison group had higher scores at the beginning of the year, there was no significant difference in growth in scores between the two groups. In essence, students stayed at the same levels in basic skills throughout the year.
7. EBCE students made a statistically significant gain in GPA over the prior year. It increased from 79.8 to 83.3.
8. Students completed 97 percent of the required career explorations, 93 percent of the competencies and 91 percent of the student projects. This indicates that students were complying with the work expectations of the project.
9. Parents felt quite positive about EBCE and their son or daughter's participation in the program. The only weakness in EBCE identified by more than a single parent (in this case by three parents out of nine) was lack of variety of job sites to meet students' interest. Strengths in EBCE identified by over half of the parents were 1) students learn about "real life" situations and responsibility, 2) quality of staff, 3) students learn about a variety of careers and

4) students gain experience in working with adults. Positive changes noted by over half of the parents in their son or daughter that they felt were a result of participating in EBCE were 1) better able to relate to others, 2) greater self-confidence and 3) more realistic attitudes toward life and work. No negative changes were noted by more than a single parent.

10. On the Employer Opinion Survey, of 24 employers, every one indicated they plan to continue participating in the EBCE program next year. Reasons cited most frequently were 1) the program is worthwhile, 2) my participation is a community service and 3) I like the people involved. Strengths of EBCE cited by at least half of the employers were 1) students learn about a variety of careers, 2) students learn about "real life" situations and 3) students gain experience in working with adults. Weaknesses in EBCE identified by a quarter or more employers were 1) students not receiving sufficient training (38 percent) and 2) lack of feedback about students (29 percent). Employers want better feedback about their own effectiveness with students at their site and about what happens to these students after they leave the site.

Adaptation of EBCE for Gifted and Talented Youth

Gifted and talented youth have unique needs for educational programs that will challenge their full ability and creativity. While there are many programs in the elementary years to address such concerns, junior and senior high gifted programs are few in number. Our two field sites using EBCE for gifted and talented junior high youth--Jefferson County, Colorado and North Clackamas, Oregon--are proving that the concept works

with this age group even as goals and objectives encompass far more than career development and life skills.

Exploring Careers in the Community for Gifted and Talented

The Exploring Careers in the Community for Gifted and Talented (ECC/GT) program model is based on the Northwest Regional Educational Laboratory (NWREL) Experience-Based Career Education (EBCE) model, modified for use in Jefferson County as Exploring Careers in the Community (ECC) and then further adapted to meet the needs of gifted/talented students at both the junior and senior high levels. It is individualized and emphasizes experience based, performance based learning.

The ECC/GT program is designed as an eighteen-week model; students spend partial days in two to five hour blocks scheduled into the program for one semester or two quarters. However, the model is intended to be flexible enough to allow incorporation into any school based on individual building needs and considerations. Students are awarded career education and academic credit, usually Language Arts and one other depending upon the subject area certification of teachers involved. The ECC/GT program is process as well as content oriented. A major emphasis is the development and application of higher level thinking skills and creative/divergent problem solving skills. These processes are practiced and applied through all of the learning strategies. Also, the development of independence, responsibility and time management/organization is fostered within the program.

NWREL's role in the junior high school ECC/GT program for 1978-79 was to provide technical assistance and evaluation. The evaluation for this second year of program operation focused on student selection strategies, student learning outcomes for 50 ECC/GT and comparison group students, and program outcomes. A separate report containing the detailed program description, evaluation procedures and findings was prepared by NWREL for Jefferson County, Colorado and is available from that school district. Listed below are the highlights of the student and program outcomes.

Student Outcomes

- ECC/GT students maintained their basic skills level while participating in the program.
- Most ECC/GT students achieved the career education goals of the program.
- Participants' confidence in their use of oral communication is improved by the ECC/GT program
- There was no evidence to suggest that participants' self-confidence was enhanced more by participation in ECC/GT than in the regular GT programs.

Program Outcomes

- The ECC/GT program is seen as accomplishing the primary goals of helping students to explore and learn about a variety of careers and to understand the requirements of career entry.
- The junior high ECC/GT program was perceived positively by parents and students as having fewer difficulties than in the first year's evaluation. Areas continuing to need program attention include recruitment and orientation of community instructors, transportation to community sites, variety of community sites and decrease in the amount of nonchallenging or repetitive "busy" work assigned students.

Learning in the Community

The 1978-79 North Clackamas Learning in the Community (LINC) Junior High Gifted and Talented program operated on an eight-week period with students participating one full day per week. Students from each of the four junior high schools were involved and met together for the weekly LINC sessions. Program activities included small group and individual career explorations, student journals, individual and small group projects as well as large and small group activities in such areas as higher level thinking skills, critical thinking, group process and self-awareness.

The first-year evaluation was primarily focused on program implementation and operation with student outcomes a secondary concern. During the first two years of a project, it is of primary importance to assess the feasibility of any new programmatic model. Preliminary findings for the first year are listed below.

- Considering the limited program contact students made considerable progress in the career education objectives.
- Affective objectives were not measurably affected by the program.
- Student selection criteria did not correlate well with each other or with the three outcome measures.
- Parents, students, staff and community instructors were generally quite positive about the LINC program, while recognizing the need to make changes in the future. Areas which were indicated to be major strengths were the opportunity to get into and become aware of the "real world" and to learn about a variety of careers. Areas which were perceived to be program weaknesses were 1) the need for recruitment and orientation of a greater variety of community sites, advance information to students and parents concerning program goals and expectations, the amount of paperwork and the time-configuration of the program.

Out-of-School Adults

NWREL's Out-of-School Adult work focused around development and implementation of a pilot version of a program entitled "Career Redirections for Adults" (CRA) operated at Western Nevada Community College (WNCC), Carson City, Nevada.

The evaluation was designed primarily to obtain outcome data as well as biographical information to assist Education and Work staff in forming the basis for researching the needs of various categories of adults. Outcome data were obtained from administration of pre- and posttest questionnaires. In addition, the participant questionnaires sought feedback regarding the strengths and weaknesses of the CRA program. Only a small number of participants were involved in the evaluation (eight responded to both the pre- and posttest sections of the program evaluation questionnaire), which limits the generalizations that can be made.

The results of this evaluation should encourage further revision and implementation of a more comprehensive and longer program. The following conclusions may be drawn from the WNCC data:

- Participants gained dramatically in confidence as to their ability to do career planning. This is a very encouraging finding for such a short-term effort.
- There appear to have been differences by sex and age groups in terms of many of the outcome variables studied. This tends to confirm the program's need to be individualized. These types of differences also suggest further study of demographic variables to determine the areas in which adults with various characteristics have particular needs that should be addressed.
- Little pre/post change occurred on any of the outcome measures. This is not a surprising finding, since the program was of short duration. Based on this and comments by participants and staff, the CRA program should be lengthened to allow especially for individual career exploration and internships.

- Participants were generally enthusiastic about the CRA program and indicated they had benefited from a number of the career planning activities.

Experiential Learning Studies

One important experiential learning study completed this year by NWREL focused on attempting to learn more about the factors that distinguish excellent learning experiences for youth versus those that lead to little or no learning. This study was based on a survey of over 1000 high school sophomores, juniors and seniors from 28 states involved in all four versions of EBCE. The questionnaire reflected various propositions from social learning theory and attended to the perceived importance of factors such as modeling, reinforcement by employers and the intrinsic interest of the work tasks. In addition to discussing the findings, this study suggests implications for program design, community resource persons and for future research. Listed below are the major findings:

At sites judged by respondents as providing rich learning experiences--

- Respondents more often learn job specific skills, including use of tools or equipment and gain specific knowledge of how the job operates through hands-on experiences.
- Respondents more often describe the people they work with as helpful and friendly.
- Respondents generally work closely with more than one person and form a good close personal relationship with at least one person with whom they work closely.
- Tasks done by students are more often judged to have high or moderate levels of responsibility and are perceived by students to be challenging.

At sites judged by respondents as providing little or no learning experiences--

- Respondents learned the same things at high learning sites, but such learning was reported by only half as many students as was reported for high learning sites.

- One third of the respondents reported having no tasks to do, or only irrelevant ones.

- On the average, respondents spent only half as much time as at high learning sites.

- Respondents attributed little or no learning to boring tasks, and no opportunities to apply learning to new things, to explore other areas of interest or to try out the work themselves.

SECTION I

INTRODUCTION

This Education and Work Program Year-End Report Technical Summary of FY 1979 Activities and Evaluation Findings has been prepared by the Education and Work Program of the Northwest Regional Educational Laboratory (NWREL) to summarize work performed under contract with the National Institute of Education. The report has been prepared for educational policy-makers, researchers and educational practitioners. In many cases, this report contains a summary of evaluation or research reports that have been published separately.

Section II of this report contains an overview of Education and Work Program accomplishments for the year written by Larry McClure, Program Director. A summary of NWREL activities in fostering EBCE state strategies appears in Section III. Over the past seven years NWREL, in conjunction with three other regional educational laboratories and the National Institute of Education, has been active in the development, testing and dissemination of a comprehensive alternative education program for secondary students called Experience-Based Career Education (EBCE). During the past year NWREL has adapted the basic principles of this program to fit the needs of various special populations. Sections IV, V and VI describe our adaptations of EBCE for migrant youth, gifted and talented junior high school students and for adults. Section VII describes the research done in experiential learning and reports preliminary findings of a study investigating the factors that distinguish excellent from poor learning experiences at employer/community sites.

SECTION II

OVERVIEW OF EDUCATION AND WORK PROGRAM ACCOMPLISHMENTS

The three work components outlined in our Technical Proposal of April 14, 1978, are (1) Experience-Based Career Education, (2) Transition and Equity for Special Groups, and (3) Extended Learning. Accomplishments for the period of June 1, 1978 to November 30, 1979 will be briefly described in terms of specific activities in each component. Deliverables or products associated with each activity are referenced following each description and are available on request.

Component I: Experience-Based Career Education

The objective of this component was to refine and evaluate the ability of states to sustain EBCE by building on the validated maturity of demonstration programs at the local level. This goal was accomplished as planned, with EBCE networks in place in the following states where our Laboratory either had the "lead" responsibility or shared that responsibility with Far West Laboratory for Educational Research and Development (FWL) or Research for Better Schools (RBS):

Lead Responsibility	Shared Responsibility	
Colorado	Alabama	Texas
Idaho	Illinois	Wyoming
Oregon	Nevada	

In these states there typically is at least one demonstration program where interested visitors may observe EBCE in operation. A number of individuals at the state, local or intermediate or higher education

levels have also been certified to train others in various aspects of EBCE. Our original notion that no one design or model for an EBCE State Strategy could be mandated held true. Each of the above states where our Lab had some leadership and participation has implemented a design that is unique for their setting. Even as federal support expired for Illinois, Nevada, Texas and Wyoming, there has been enough institutionalization so as to keep the EBCE flag raised high. And for a state like Colorado that received no NIE funds, EBCE is now an ongoing responsibility of a state agency staff person. Indeed, there has been interest from other states--in our case, Michigan--in installing an EBCE state network like the ones that were part of our FY79 plan.

In the meantime, of course, we have tried to be responsive to external requests for information about EBCE and to promote national networking. The most visible example of this was formation of the National Experience-Based Career Education Association (NEBCEA) and the third annual gathering of sites adopting our model of EBCE. Our Laboratory was privileged to have three representatives on the planning committee for the Association: Rex Hagans, Bob Blum (on loan from Colorado to direct our USOE career education dissemination project), and Loyd Knudson, a local labor leader. Hagans and Blum now hold seats on the newly constituted NEBCEA Board of Directors. The third annual site debriefing conference, held near Portland at Vancouver, Washington in June, at no cost to this grant, brought together persons from our EBCE sites across the nation. This occasion was valuable not only for information-sharing and seeing old friends but for data gathering for our experiential learning research.

Our capacity to continue fostering the spread of EBCE was also greatly enhanced by a USOE contract we acquired in FY78 to become a Developer-Demonstrator site as part of the National Diffusion Network. We were able to respond to many more requests with those additional resources.

PRODUCT OF THIS ACTIVITY: State Strategy guidelines that suggest to other states how they might approach EBCE networking. These selected case studies and overall recommendations have implications for dissemination of other educational innovations as well.

Component II: Transition and Equity for Special Groups

The purpose of this component was to validate the ability of proven experiential delivery systems to help individuals who have traditionally not enjoyed equal access to education and/or employment opportunities acquire skills that enhance education and work transition. Our work focused on the following special groups:

A. Disadvantaged youth
B. Migrant youth
C. Out-of-school adults

A. Disadvantaged Youth

The disadvantaged youth activity has concentrated on ways EBCE type strategies can be adapted to the needs of economically disadvantaged youth who are being served in formal education settings. One area of high interest has been the career development of young women who are interested in pursuing nontraditional careers. The field site for this activity is located in eight Portland high schools, with operational funding provided by the Laboratory through a contract with the U.S.

Department of Labor. Working with Portland school staff, we have adapted both in- and out-of-school EBCE-type activities for some 120 young women who elected to participate. This project, which grew out of an earlier collaboration with the Portland schools on creation of a career development plan for CETA-qualified youth and eventually all secondary students, is slated to continue through the 1979-80 school year, with an intensive follow-up extending through March, 1981. We expect some valuable data to emerge.

A second field site for this activity was the Portland Job Corps Center, where the emphasis was on adaption of the EBCE career exploration process to the mid-training phase of the agri-business cluster. Our goal to ascertain the extent to which experiential strategies can be used with CETA-qualified youth was further accomplished by a field site comprised of reservation-based Indian youth in Warm Springs, Oregon. This project in Central Oregon is funded by Youthwork, Inc., and gives us access both to staff and participants for technical assistance in EBCE adaption and evaluation of results.

PRODUCT OF THIS ACTIVITY: Our guidebook for decision-makers in programs serving CETA-qualified youth describes critical issues in LEA/CETA collaboration that experiential strategies adapted by NWREL address. For each element a definition of our approach is provided, followed by a brief historical perspective, an analysis of what we are learning, and recommendations that policymakers and system operators should consider. Perhaps more importantly for us, this guidebook will suggest emphasis areas of research during FY80-82.

B. Migrant Youth

Migrant youth who either follow the crops or who are "settled out" now in local communities have been recognized as a population with needs for targeted supplementary learning assistance. This was our second year in an effort to adapt EBCE technologies to secondary aged migrant youth. We were pleased to see a very successful pilot program for migrant youth in the largest "sending" state--Texas--finalize with positive results. This Mission, Texas field site was a first effort to determine if EBCE would capture the fancy of traditionally drop-out-prone middle and senior high school level migrants who typically leave the Rio Grande Valley in April to return in October. We also saw the shaky beginning of an anchor program in Yakima, Washington; however, personnel problems at that site overshadowed an effective test of EBCE strategies there. To reach toward our intended goal of an interstate network which would foster the transfer of credits as students move from state to state, our efforts concentrated on sharing information about EBCE between and among federal, state and local agencies concerned with migrant education. Indeed, 12 Western Stream states attempted to secure funding for a joint project from the U.S. Department of Labor (Youthwork). While that venture did not prove successful, we now feel that grassroots support can be coalesced for an interstate venture. There is a distinct possibility that USOE funds would support such an interstate linkage. During FY80 we shall actively pursue this possibility for a field site network so as to "piggyback" our research. However, an interstate program to serve mobile migrant youth that we forecast at the beginning of this grant period remains only a design on paper.

PRODUCT OF THIS ACTIVITY: A status report of interagency migrant adaptation activities is included in this "Technical Summary of FY79 Activities and Evaluation Findings."

C. Out-of-School Adults

Our out-of-school adults activity benefited considerably from our field site at Western Nevada Community College in Carson City, where staff there operated a Career Redirections for Adults project which has helped us understand a great deal more about the career development and learning needs of adults. In this project, persons participated in a multi-session, no-fee, independent-study, self-analysis and planning set of activities supplemented by group counseling. Exploratory experience at community sites was included.

Additionally, separate contracts in Alaska aimed at the education and occupational needs of adults have been a vital pasrt of our NIE work as well. One contract with the Alaska State Department of Education was a feasibility study and prototype occupational exploration and preparation access system for rural areas. The second was a contract to assist in a detailed inventory and analysis of educational and training opportunities in the Kenai region. In both cases, findings have been useful in shaping research questions for FY 80-82.

PRODUCT OF THIS ACTIVITY: A report on our out-of-school adults project details FY79 activities and a companion notebook of sample materials for adult career redirection comprise the deliverables for this work unit.

Component III: Extended Learning

The objective of this cluster of activities was to identify the essential factors of, and options available through, community-based experiential education and to use these strategies effectively in programs where students and teachers alike seek to extend learning beyond classroom walls.

Our thrusts in this component were several:

A. To conduct research on experiential learning

B. To test the effectiveness of experiential learning with gifted and talented youth

C. To develop and field test strategies for teacher preparation programs interested in adapting experiential learning into existing curricula

D. To develop the framework for a regional information exchange on experiential learning

A. Research on Experiential Learning

This activity had several interesting facets, all of which were pointing toward concentrated research in FY80-82. Our panel of consultants, whose own research and involvement in experiential learning is substantial, provided valuable guidance. With their advice we were able to focus on instrumentation needs and common elements of experiential learning and then search for clarification of these research questions in programs serving several hundred young people en totum. Our collaboration involved such programs as Foxfire (cultural journalism), the Center for Research in Vocational Education, and the Boy Scouts of America. We chose not to hold a national conference on the impacts of experiential learning but to make presentations at national meetings of people with

"like minds" and to publish journal articles that help advance the state-of-the-art (see information exchange section for more details).

PRODUCT OF THIS ACTIVITY: Status of our research on experiential learning is contained in this "Technical Summary of FY79 Activities and Evaluation Findings."

B. Gifted and Talented Youth

Gifted and talented youth have unique needs, beginning with identification of those young people with particular talents, and the gifted who need special nurturing. While there are many programs in the elementary years to address such concerns, junior and senior high gifted programs are few in number. Our two field sites using EBCE for gifted and talented junior high youth--Jefferson County, Colorado and North Clackamas, Oregon--are proving that the concept works with this age group even as goals and objectives encompass far more than career development and life skills. Each of these two programs is unusual in its construction, particularly when compared with our original EBCE site in Tigard where the first strategies were developed. We shall continue our research on these adaptations of EBCE for talented and gifted learners as part of our "Exceptional Youth" activity in FY80-82.

PRODUCT OF THIS ACTIVITY: "Final Evaluation Report--Jeffco Gifted and Talented Program" and "Technical Summary of FY79 Activities and Evaluation Findings."

C. Teacher Preparation in Experiential Learning

Our teacher preparation activity has demonstrated how pre- and inservice teacher education programs can utilize experiential learning strategies as a tool for effective teaching. Working with college programs in Oregon, Idaho and Montana, we were able to encourage application of EBCE strategies both as a separate course of study or workshop, as well as a thorough infusion of experiential strategies into existing coursework. In a collaborative project with Portland Public Schools, using USOE funds, we designed and tested a six-session workshop aimed at K-12 teachers who themselves went into the community and examined its potential as a learning resource.

PRODUCT OF THIS ACTIVITY: A notebook entitled "Teacher Preparation in Experiential Learning" includes sample syllabi and teaching methods which can be used both in college settings as well as in school district staff development programs.

D. Regional Information Exchange on Experiential Learning

Our regional information exchange was actually a feasibility test and exploratory venture to assess the need for and alternative implementation of patterns for such a service. Documentation of what our staff did during these past 18 months is a strong endorsement of what a Regional Exchange can do. There were dozens of presentations at conferences, articles and news items in journals and newsletters, and hundreds of written and telephoned responses to requests for information and referral. Our Regional Program Advisory Committee has demonstrated the value of this kind of dialogue as have our annual EBCE site debriefing

conferences (see Component I). As this grant period ends, we are planning jointly with Alaska Department of Education for a two-week summer workshop in 1980 to demonstrate how in-depth EBCE training can be coupled with more generalized experiential learning strategies to attract a broad cross section of K-12 and youth agency staff (using Teacher Preparation strategies from Activity D above). We are planning to implement the Regional Information Exchange in FY80-82 based on this exploratory phase.

PRODUCT OF THIS ACTIVITY: "Experiential Learning Information Exchange: Summary of Activities and Outline of Intended Services."

SECTION III

EBCE STATE STRATEGY ACTIVITIES

Scope of This Report

November 30, 1979 marks the end of NIE funding for a three-year NWREL effort to establish EBCE networks in several states. This report will summarize the technical assistance provided by NWREL during FY 79-80 and suggest the resulting capacity in each of the targeted states to operate their EBCE State Strategy.

This report will not attempt to analyze the reasons for the differences among the states, either in terms of their approaches or the effectiveness of the networks. Such an analysis is contained in another document, the EBCE State Strategy Guidelines Report, to be available in the near future.

NWREL's State Strategy Model

NWREL identified seven functions that need to be performed in order to have an effective state network that operated independently of Laboratory assistance:

1. Coordination/leadership of the statewide effort
2. Brokerage of the EBCE concept to interested audiences
3. Program planning with districts deciding to adopt or adapt EBCE
4. Staff training and in-service for teachers operating the new EBCE program
5. Training of consultants/trainers to perform functions thre and four above
6. Demonstration of EBCE through operating program sites
7. Evaluation of state network efforts and of operating EBCE programs

For three of these functions--coordination/leadership, demonstration and evaluation--NWREL established no formal training and certification process but assisted in their development with both materials and consultant assistance. The four remaining functions--brokerage, program planning, staff training and training of consultant/trainers--are the ones specific to EBCE processes, program installation and information. For each of these functions NWREL developed specific training activities, described in the EBCE Trainer's Handbook, and a certification process, described in the document titled "NWREL EBCE Certification Process."

Participating States

First-Round State Strategy States. States in this category had four things in common: they were funded with NIE money in 1976 specifically to develop a network; their state departments initiated the planning and training effort; they had a funded coordinator located in the state department; and they had a written plan for EBCE training and dissemination.

Four states--Illinois, Nevada, Texas and Wyoming--selected NWREL as their lead Lab from among the four Labs offering EBCE technical assistance.

Second-Round State Strategy States. States in this category were selected in 1977. They differed from the first round states in these ways: they received no specific funding to establish a network, but they did receive from NWREL free technical and training assistance; their state departments provided support and coordination; coordinators were assigned but state strategy was not necessarily their only job

description; written state plans for training and dissemination were required. Colorado, Idaho and Oregon became NWREL's second-round states.

Unofficial State Strategy State. In Michigan, a grassroots EBCE network grew without formal recognition or support from NIE. This effort will be included here as an interesting addition to the first- and second-round states.

First-Round State Strategy States

Illinois

Illinois' state strategy plan was unique among all the NIE state strategy states in its emphasis on widespread awareness over the entire three-year period. In addition, particular attention was paid to orienting university staff to EBCE's applicability to their education courses and preparing them as key participants in the statewide network.

As a result, of seven individuals certified as NWREL EBCE brokers, six are university instructors; a seventh university instructor is an Experience-Based Learning (EBL) instructor. One of the university people who is a broker is also a planner, EBL instructor and trainer of brokers, planners and EBL instructors. Another "university broker" is also a trainer, EBL instructor and trainer of brokers and trainers.

NWREL-arranged technical assistance during FY 78-79, listed below, included a trip by the Colorado state strategy coordinator who is NWREL-certified in all technical assistance functions.

Date	Type of Session	Audience	Days	Number of Participants
3/3-8	Staff Training (Jan Cromwell; Colorado)	State Strategy Coordinator and Decatur staff	5	7
8/7	Consultation regarding State Strategy Plan	State Strategy Coordinator	1	1

Nevada

Nevada concentrated on developing a training capability at the state level, in the Department of Education. Training was viewed as a continuing responsibility of the state education agency and few regional or local EBCE staff members have been engaged by the state coordinating office to augment this staff training capacity.

In 1979, NWREL delivered the following technical assistance to support Nevada's state strategy:

Date	Type of Session	Audience	Days	Number of Participants
10/22-23	Awareness/Staff Training	Stewart Indian School staff	2	5

At the end of the contract period, six operating EBCE sites had been started with NWREL technical assistance and four had been trained by Nevada's one NWREL certified broker/planner/staff trainer/EBL instructor/trainer of brokers, planners, trainers and EBL instructors.

Texas

Texas developed a cadre of trainers in regional service centers throughout the state as well as preparing trainers at the (State Educational Agency (SEA) level. This state has a thorough system of service district staff with primary responsibility for assessing district

needs and recommending alternative programs. Since these individuals are in frequent contact with local districts, the coordinator used this structure to develop an ongoing training capacity.

NWREL was called upon to deliver no technical assistance in Texas during FY 78-79. During the three-year contract period, two sites were initiated with NWREL's help and none were started without it. Fourteen people are certified as brokers, ten as planners, none as staff trainers and eight as trainers of both brokers and planners.

Wyoming

The functions in the Wyoming State Strategy network are shared among several members of the networking team as follows:

1. EBCE awareness and orientation: University of Wyoming and staff from schools presently operating EBCE program.
2. Diagnosis and planning: State Department of Education EBCE coordinator.
3. Installation (implementation): university and local school district staff trained in EBCE.
4. Modification and operations monitoring: State Department coordinator.

Four individuals are NWREL-certified staff trainers as members of a team (i.e., no one individual is fully certified), and one person is a broker, planner and trainer of brokers. Five sites were NWREL-assisted; none have been started by Wyoming staff alone.

Following is a summary of technical assistance delivered by NWREL in FY 78-79:

Date	Type of Session	Audience	Days	Number of Participants
8/1	Planning for Staff Training	Fremont School District (SD)	1	1
8/20-21	Staff Training	Fremont SD	2	10
1/22-26	Staff Training	Fremont SD	1	1

Second-Round State Strategy States

Colorado

Colorado has developed its own system, patterned after NWREL's, of training individuals in both the SEA and in local EBCE programs. In this state, resource training teams are being used to provide start-up training to new EBCE staff members. This option operates in concert with strong central coordination of training and effective utilization of local training resources.

Six people are trained as brokers, five as planners and five as staff trainers; one is a trainer of brokers, one a trainer of planners and five are trainers of trainers.

Six projects, which include 16 schools, have been started with NWREL assistance; two began with Colorado staff support only.

In FY 78-79, NWREL provided the following services:

Date	Type of Session	Audience	Days	Number of Participants
10/2-6	Staff Training	Jefferson County SD	5	10
11/13-17	Staff Training	Jefferson County SD	5	15
4/19-20	Follow-Up Technical Assistance	Jefferson County SD	2	2
6/4	Trainer Certification	Jefferson County SD	1	1

Idaho

The Idaho State Career Education Coordinator is also the coordinator for the NIE-sponsored Idaho State EBCE Network. This individual, a NWREL-certified EBCE broker, routinely includes an EBCE overview in career education presentations she makes throughout the state.

Five other brokers comprise the NWREL-certified staff in Idaho.

Of the two EBCE projects, one received NWREL assistance and the other spun off from that original project in the same town.

Technical assistance delivered during FY 78-79 follows:

Date	Type of Session	Audience	Days	Number of Participants
11/16	Awareness	Several Districts	1/2	20

Oregon

Oregon has used a training system which emphasized certifying EBCE staff in operating EBCE programs to fill staff training needs. However, in this state an informal network with extensive experience but no lab

certification has been available as well. The state coordinator is apprised of all qualified trainers in the state and refers requests to the most regionally appropriate resource.

The NWREL-certified individuals include six brokers, one planner and three trainers. Four sites started with NWREL assistance and one without.

Following is a summary of NWREL technical assistance during FY 78-79:

Days	Type of Session	Audience	Days	Number of Participants
12/15	Staff Training	Albany School District SD	1	2
1/11	Awareness	Oregon Regional Coordinators of Migrant Programs	1	14
1/2	Program Planning	North Clackamas SD	1/2	2
1/18	Program Planning	North Clackamas SD	1/2	1
1/30	Program Planning	North Clackamas SD	1	6
2/15	Staff Training	North Clackamas SD	1	6
2/28	Staff Training	North Clackamas SD	1/2	6
2/27	Program Analysis	Regional Program For Deaf, Portland Community College	1/2	1
3/13	Awareness	OR State University	1/2	1
3/5	Awareness	OSU graduate students	1/2	5
3/7	Awareness	Oregon Upward Bound	1/2	2

Date	Type of Session	Audience	Days	Number of Participants
3/6 3/15 3/29	Staff Training	North Clackamas SD	2 1/2	6
4/11 4/12				

5/10	Staff Training	North Clackamas SD	2	6
4/19	Broker Training	Oregon Regional Coordinators	1	4
5/1	Awareness	Career Information System	1/2	1
6/5	Awareness	Marion County Educational Service District (ESD)	1/2	1
6/6	Debriefing	North Clackamas SD	1/2	6
6/13	Awareness	Multnomah ESD	1/2	1
7/12	Awareness	Multnomah ESD	1/2	1
8/27-29	Staff Training	Warm Springs	2	10
9/4-5	Staff Training	Warm Springs	2	4
9/13-14	Staff Training	Warm Springs	2	4
9/13	Awareness	Portland Public Schools	1/2	1
10/26	Awareness	Beaverton	1/2	1
11/13	Awareness	Linfield College	1/2	15
11/23	State Strategy Program Review	Oregon State Dept. of Education (SDE)	1/2	1

Unofficial State Strategy State

Michigan

Michigan has a training capacity located solely in the hands of local staff. These individuals currently provide coordination of all EBCE activities and offer training to districts interested in the EBCE programs. Although these trainers have not completed official certification, they are amply qualified to carry on the training role and aid in implementing new sites. Their organized and economical approach

to dissemination, plus the benefit of having ready contact with peers, is proving to be a particularly valuable and effective approach.

At the end of the NIE contract period, two individuals were NWREL-certified as brokers and planners. Four sites had been started with NWREL assistance and one with Michigan help only.

Technical assistance from NWREL during the year included the following:

Days	Type of Session	Audience	Days	Number of Participants
1/8-10	Planning for State Conference	Michigan SDE	3	6
2/16	Statewide Awareness Conference	Many Districts	2	100
5/23	Awareness/Program Planning	Western Michigan University	1	2

SECTION IV

ADAPTATIONS OF EBCE FOR MIGRANT YOUTH

Status Report on Interagency Migrant Adaptation

Introduction to the Problem

Traditional educational delivery methods have not been able to retain migrant youth in school. Education that mobile migrant youth have received in the public schools has been fragmented because of inconsistency in the delivery of services between school districts. Until the birth of the Migrant Student Record Transfer System, there was little or no coordination between districts to establish some sort of continuity in the education of migrant children as they moved from school to school.

Inconsistency not only creates negative experiences for the migrant student, but for the teachers themselves. Not all districts have migrant students, but those that do have already witnessed an almost 100% failure rate of their migrant students, and they have become accustomed to expecting failure. There are few reliable estimates that can be given regarding the numbers of past failures by migrant youth in the country. Even current data are contradictory. Reports by Rural America (Sept. 1977) and by Legal Services Corporation (May 1977) illustrate this fact quite clearly, as different agencies try to address the problems faced by migrant farm workers and their families. Even the definitions to describe who are to be considered migrants have caused great debate.

The number of migrant farm workers in the United States has been estimated to be as high as 6,000,000. In 1973, it was estimated that

5,000,000 migrant and seasonal farm workers were eligible for services by the Office of Economic Opportunity, now known as the Community Services Administration. This year the U.S. Office of Education estimated that it serves approximately 500,000 migrant children through the Title I of the Elementary and Secondary Education Act, and that 500,000 more children are eligible for their services. No agency, private or public, can provide exact numbers of migrant workers or how many children would be eligible for services through Title I-M programs. The average educational level attained by migrants is estimated to be at the sixth or seventh grade.

Academic assessments completed by Marion County, Oregon migrant staff have shown that most migrant youth are one to three grade levels below the norm in all subject areas.

The failure of migrant children cannot be blamed on the children themselves, their families or the fact that they move frequently. What many leaders are beginning to recognize is that traditional educational delivery methods will not work for migrant youth, no matter how much tutoring and counseling is offered. A system is needed that can provide the migrant youth with a continuous educational experience and an educational philosophy that does not blame the migrant youth or their environment, but takes them forward from where they are.

Is Career Education an Answer? In a recent research report, "Work Experience and Career Education Programs for Migrant Children," Roberto S. Guerra (Austin, Texas), discusses some important considerations to keep in mind regarding career education programs for

migrant students. He writes, "...many migrant children live in rural or semi-rural areas of the country, where jobs and consequent career options are limited." He recommends the following for migrant career education programs: (1) that they (the students) be exposed to a wide range of career alternatives; (2) that they be provided with the basic skills necessary to compete in the existing labor markets, and (3) that they acquire adequate decision-making capabilities, especially in regard to careers. Mr. Guerra was not able to find programming in his research that addressed the needs of secondary migrant youth.

The need for a secondary program for migrant youth is clear. A community based interstate program for migrant youth may provide a framework for cooperation between states and migrant programs that will give migrant youth continuity in their education and reasons to remain in school. The problem seems to grow for each individual migrant child as he or she moves from one grade level to another. And it becomes most acute at the secondary level, where there already is a shortage of programs for migrant youth.

Overview of Migrant EBCE

With modest funding from NIE, work began in February, 1978 to disseminate EBCE for migrant student use. General mailings to all state migrant directors were sent, with information about EBCE, and some district directors who expressed an interest received telephone calls and personal visits.

These early efforts resulted in two pilot projects, the first in Mission, Texas and the second in Yakima, Washington. Staff in both projects had been specially trained, and had received experience working with migrant youth. It was felt that although migrant youth had unique problems due to their transient status and economic situations, EBCE would add new meaning to the educational process. While in the program, they would not only improve their basic skills and life skills, but they would also explore careers. This type of learning seemed practical and useful for migrant youth, who needed immediate help, not help four years in the future.

What Distinguishes EBCE for Migrant Youth. Decision-makers in the Texas and Washington pilot programs sought ways to blend migrant youths' needs in life skills, social development and career knowledge with real life experiences via hands-on activities wherever people were working and real work was going on. By providing migrant youth with these cumulative experiences in a variety of everyday work settings, the pilot tests sought to help migrant youth (a) know themselves better by refining their interests, abilities and values to develop realistic and obtainable career and life goals, (b) understand that they have personal power and can have control over their lives, (c) build the decision-making skills needed to put what they have learned together with what they want to do, (d) learn that basic skills in written and oral communications and mathematics are essential for accomplshing their career and personal goals, (e) gain a broad understanding of the world of work--its relevancies, rewards and shortcomings--by learning what they could expect

from it and what it would require of them, and (f) discover that the adult world is not simply an "establishment" but is made up of many different people with their own goals, values and personal characteristics.

Like EBCE for "regular" schools, this adaption was based on the idea that experience fosters knowledge, and knowledge creates expertise and success. Most migrant youth not only suffer from economic poverty, but they are also experience-poor. They are particularly lacking in experiences in the democratic process and the free enterprise of business and work community. EBCE can help migrant youth make the transitions between communities and various cultures they may encounter and to learn to cope with the various differences. Since so many migrant youth leave the educational system without a career focus, the program is aimed at helping the youth become aware of their own skills and abilities, assess the economic and career opportunities available to them, and then begin realistic career decision-making processes. Another purpose is to provide positive and successful work/learning experiences for the participating youth in areas of interest to them. Each program provides relevant local data that will familiarize each student with the local community and agencies which could provide services or opportunities for them and their families. This emphasis develops carefully planned community development techniques as well as sensitive and strong parental involvement in the entire career development process.

Each program develops a personalized learning and career plan based on individually identified and assessed needs of each participating youth. These plans are negotiated with the student and made available to parents

as well as each program the migrant youth attends. The individual learning plan will change as the needs of the migrant youth change.

Participating youth have program input through negotiations with project staff on all activities in which they will be involved while in the program. The negotiation process begins upon their entry into the program (parental involvement begins here also) in the development of their personal learning and career development plan.

Migrant youth work on developing basic skills by performing real work activities in the local business community. Basic skill development reflects each student's basic education needs while working in career areas of their own choosing. Migrant youth get a realistic view of the need to develop their basic skills which are essential to accomplish their career and personal goals. All career explorations, job development, skill building and other activities that migrant youth do in the community and the center earn them academic credit upon successful completion. The program integrates basic skills, life skills and career development into all activities.

Ideally, if an interstate network were created, participants would be able to take their projects and assignments with them to other programs. Cooperation between the business community and the school districts, to provide educational and career services to migrant youth, is a major emphasis of EBCE. The migrant youth spend about 50 percent of their time in the community at job sites exploring careers, and at other community sites collecting data to complete academic assignments. The community

experiences place students in public and private agencies, where they will be apprised of services available and how those agencies can be used for their personal development as citizens and consumers.

A staff member in Mission, Texas put it this way:

> "It is a total educational delivery system designed around the needs of the students, which blends textbook learning with hands-on experiential learning in the community through projects, career explorations and practical survival skills development. Most programs try to fit the students into the entire program, rather than designing an individual learning plan for each student."

Research Findings

Literature Review. Two methods were used to search for programs or materials related to career education for secondary migrant students. The first was a computerized ERIC search in calendar 1978, using descriptors which linked career education with migrants and career education with secondary migrant programs. Interstate and interagency descriptors were also used in conjunction with secondary migrant programs. The results were sparse. No programs were found to link career education for migrant students at the secondary level. There were several interagency and insterstate migrant programs, but only one that was aimed at the secondary level: the Washington-Texas Credit Exchange Program, with their headquarters in Connell, Washington.

The second method used consisted of contacting existing programs by telephone, visiting their libraries and talking with staff persons who had been involved with migrant programs. The Salem, Oregon Migrant

Education Service Center had a research document in their library written in 1976 by Robert S. Guerra (Austin, Texas) entitled, "Work Experience and Career Education Programs for Migrant Children." This is a well-researched position paper which advocates the infusion of career education into migrant education programs. Mr. Guerra did not mention any existing research projects or current programs in career education for secondary migrant students.

Other Migrant Career Education Programs

Based on contacts with state leaders, we found career-oriented programs for secondary migrant students in the states of Washington, Mississippi and Georgia.

Washington. The Migrant Opportunity Center located in Yakima, Washingon has a program to serve migrant students at the secondary level. The program includes, but is not limited to, learning experiences in the following as they relate to work: appreciation and attitudes; self-awareness; decision-making; educational, economic and skill awareness; employability skills, and supplementary subsistence.

Mississippi. The Migrant Career Education Program located in the Leflore County Schools, Greenwood, Mississippi serves students in grades 7-12. The students receive continuous evaluation of their career objectives by attending their career education classes two hours per week. Testing, exploration packets and field trips are a major emphasis of this program.

Georgia. The North Georgia Cooperative Education Service Agency has a career education peogram on wheels for the Migrant Consortium Career Education. They have a complete K-12 career education program for the migrant students. The program is divided into three major segments by grade level. K-6 is Career Awareness done through a variety of activities. In grades 6-9, the Comprehensive Occupational Assessment Training System (COATS) is implemented. In grades 10-12, the emphasis is on career preparation, also accomplished through a variety of hands-on experiences, field trips and exploration packets for several careers.

During December, 1978 the Yakima, Washington project staff were trained to implement our EBCE model, using their own students. NWREL received a curriculum guide from the Georgia project that included learning activities for grades 10-12, which included self-realization, economic efficiency, social relationships and civic responsi- bilities. Also included were learner goals and objectives for the same four areas listed above. Most of the activities appeared to be classroom activities that could occur in various classes at a high school, such as English, Mathematics, Social Studies, History, Health and Physical Education, Science. There were also role playing activities, discussions and field trips.

This model is being considered for adoption by the Georgia Career Education Task Force, Migrant Education Division, for grade K-12. The classroom activities were developed by the Hawaii Career Development Continuum Project and sponsored by the Georgia State Department of Education. The guide is available from the North Georgia CESA Migrant

Consortium, P.O. Box 867, Canton, GA 30114. Telephone: (404) 479-4559.

Title I Migrant Education Issues and Concerns

Our research efforts were made to determine the concerns which migrant student educators and administrators had for the present and future needs of migrant children at the secondary level.

Every person with whom we spoke regarding programming for migrant youth at the secondary level expressed an interest in EBCE, and reiterated the concern to develop programming. Some states have begun to develop and/or investigate possible programs

The November 13, 1978 Federal Register Part III Grants to State Educational Agencies--Migrant Children, has an appendix entitled "Summary of Comments and Responses," dealing with state migrant program directors' concerns regarding migrant student education, as follows:

- Dropout Prevention
- The Use of Title I-M Funds to Pay Students
- Individualized Learning Plans for Each Migrant Student
- Basic Skills Development
- Guidance and Accountability
- Providing an Education Beyond Basic Instruction
- Career Development
- Parental Involvement

The Use of Title I-M Funds to Pay Students. EBCE can be considered a work/study project which is designed to meet the students' educational needs.

Individualized Learning Plans for Each Migrant Student. In order for EBCE to provide for each student as a unique individual, an assessment of basic skills, career interests, life goals and learning style, (which is how a student learns best) is made for each student. This assessment information provides the basis for developing the student's individual learning plan. This information is then shared with the student, the staff, the student's parents and employer instructors with whom the student comes in contact in the community. The student's learning plan is always referred to when learning activities are prescribed so as to reflect the student's needs.

Basic Skills Development. EBCE basic skills development concentrates on reading, mathematics, writing, listening and speaking skills essential in performance of tasks and functions which students will encounter in the program and the community. Basic skills represent one of three EBCE curriculum components and are integrated throughout the program.

Guidance and Accountability. Guidance and accountability are integrated throughout the program rather than being treated as a separate function. Student problems are dealt with when they occur with whomever is involved. EBCE staff help students make decisions and take responsibility for their own actions.

Awareness and Dissemination of Migrant EBCE

With the apparent national lack of programming for migrant youth at the secondary level, NWREL embarked on a planned test of the idea at both policy and operational levels.

Strategies for Awareness. As of February, 1978 EBCE was basically unknown to migrant student educators and had only been suggested as a possible solution by people already using EBCE. Since most existing EBCE programs are part of a school district, it made sense to contact the people in the Title I Migrant programs already working with migrant youth in districts throughout the United States. Title I migrant student education programs have been in existence since 1967 and have a well established national organization. The awareness strategy was to utilize their existing channels of communication, starting at the national office in Washington, D.C. Subsequently, various state migrant youth directors as well as certain individuals were pointed out as being interested in EBCE.

Awareness strategy brochures and materials were put together and used extensively in contacting additional interested individuals and national migrant education conferences. General mailings to all state migrant directors were sent, with information about EBCE, and some district directors who expressed an interest received telephone calls and personal visits.

Selected presentations were made at various migrant conferences. For example, Humberto Reyna made a presentation to all state migrant

directors at their Silver Springs, Maryland meeting in December, 1978. In February, 1979 two presentations were made to 40 educators and parents at the Western Streams Migrant Conference in Sacramento, California. Sixty more educators, directors and parents were given EBCE awareness during three presentations at the Twelfth Annual Migrant Education Conference, held in May, 1979 at Virginia Beach, Virginia.

Strategies for Dissemination. The initial strategy was to establish a pilot Migrant EBCE project and validate EBCE for migrant student use. At the same time we would have a project to use as a demonstration site for others expressing an interest in Migrant EBCE.

It was anticipated that several sites would be set up following the initial pilot projects so that we could then help some migrant students move from one Migrant EBCE site to another. The idea of Migrant EBCE was well received everywhere but no commitments to start programs were firmed up. Consequently the idea of having a migrant youth move from one EBCE site to another remained an idea rather than a reality. The interest in EBCE still exists and we should continue to pursue those states most interested.

One thing did become abundantly clear. EBCE for mobile migrant youth will only be feasible if there are programs or personnel ready to receive the students once they leave their home school.

Pilot Programs

Two pilot sites were established --one in Mission, Texas (October, 1978) and another in Yakima, Washington (December, 1978). Each program began with 20 students and operated for one year.

Mission, Texas. The program planning and staff training for the Mission Migrant EBCE was completed in late September, 1978 and 20 students began in October. Sue Cook, a NWREL EBCE trainer, conducted the training. The staff started instrumentation of their EBCE program before the training was completed, by recruiting community sites and writing projects to be incorporated. The Mission, Texas Migrant EBCE program operated equally efficient as other EBCE site programs the first year. Funding for the second year was not forthcoming.

Yakima, Washington. The Yakima site went through some difficult times. They had an existing career-oriented support service program for migrant youth (mostly part-time) when the staff were told that they needed more activities for the students and that EBCE was to be used. NWREL program start-up technical assistance was provided at no cost to the district in return for NWREL's being given data about the program as a pilot site for migrant students using EBCE learning strategies. NWREL continued technical assistance and training at various times during the year. However, because of staff resignations and poor communication, the project was terminated.

Future Directions

Past NWREL research, conversations and interviews with migrant educators from various states have led staff to believe there is a lack of programming at the secondary level for migrant student youth. There are no programs that provide the migrant secondary youth with a continuous educational experience as they move from one school to another.

Research has also revealed that migrant educators everywhere are anxious to provide the same type of educational experiences to migrant youth that are a regular part of an EBCE project.

With this in mind, the following recommendations are offered:

- There has been increasing support for developing an interstate/intrastate educational network for secondary migrant youth by various migrant educators and NWREL should continue to make EBCE available to migrant educators as a vehicle for a national educational program for junior and senior high school migrant youth.

- NWREL should continue to assist Title I Migrant programs at the state and local level to secure additional, funding for startup costs, such as the training of a cadre of Migrant EBCE staff trainers and program planners. These trainers are needed to make Migrant EBCE a part of the national migrant educational experience. This self-sufficiency should be stressed when talking with migrant educators.

- NWREL, along with state migrant directors, should begin to develop a pilot interstate program with a few states such as in the Western Migrant stream and involve as many districts as will participate. Migrant educators already have experience in disseminating a national program as they are doing right now in implementing the National Skills Transmittal system. The same Skills Transmittal system could be integrated into EBCE learning strategies for migrant youth.

- Translating EBCE student materials into Spanish would make it a more desirable program for some migrant educators. The translation would also make the program available to a larger migrant population, including adults.

- Costs of a Migrant EBCE program operations, start-up and per pupil costs are of great concern to migrant educators in deciding to even look at EBCE as a viable program. NWREL should put together some facts and figures that would specify costs with some possible comparisons of other migrant programs currently operating.

- Finally, Migrant EBCE program directors at various levels should be invited to attend the National EBCE conference and also to visit NWREL in Portland. They already approve of the idea of EBCE and its learning strategies,, but they have difficulty visualizing the program at work.

Evaluation Summary of the Mission Texas Adaptation of EBCE

This section presents a summary of evaluation data analyzed by the evaluation unit of the Education and Work Program at the Northwest Regional Educational Laboratory for the Mission Texas Migrant EBCE project. The 1978-79 school year marks the first year of pilot testing the adaptation of the Experience-Based Career Education project with migrant students. The data contained in this report need to be regarded as preliminary since the Mission Texas project was in its very first year of operation and full year data are available on only eleven students.

Initially approximately 50 students indicated an interest in joining the Mission Texas Migrant EBCE program. Of that number a few parents declined to approve of their child's participation, several needed special education and some were found to have not migrated in several years and, thus, were excluded from participating. In selecting students to participate, an effort was made to get a balance of males and females and a balance of students of high, medium and low academic ability. In October 1978 the Migrant EBCE program started with 17 ninth grade students.

The Texas Education Agency gave permission for EBCE to award nine credits--three in English, three in mathematics and three as a career education elective. The EBCE Process Checklist completed by the project director indicated the program has incorporated the NWREL objectives in career development, basic skills and experiential outcomes. Many NWREL EBCE competencies and life skills projects are part of the curriculum.

Students learn about various careers through visiting job sites and completing career exploration packages. Students can select one or more sites for a more in-depth study referred to as a learning level. Throughout their participation in EBCE students are required to write in a personal student journal which is shared with a project staff member who responds to the student's experiences and feelings. Finally, the EBCE Essential Characteristics Checklist, also completed by the project director, indicated that the program is operating in a way that is consistent with NWREL's philosophy of EBCE.

Student Information

On the Student Background Questionnaire students were asked to rate seven factors as to how important each was in deciding to join the Mission program. Rated as extremely important was wanting "to prepare for a job" (average of 4.6 on a 5 point scale.) Students rated wanting "to learn how going to school can help get them a job", "to learn about careers" and "to get regular school credit while learning about different jobs" as other important factors (averages of 4.2, 4.2 and 4.0 respectively.)

On the Learning Style Self Assessment Mission EBCE students were asked in what physical situation they learned best. Both the male and female students indicated that they learned best in quiet places. The male students also indicated that they preferred to be alone while learning. When asked about the ways they chose to learn, none of the male students chose "attending class" as a way in which to learn. Rather, 75 percent of the males chose "hands on" activities as the primary way in which they chose to learn.

The students were also asked to check what they thought were the hardest things for them to do in school. None of the female students felt that reading was a hard subject for them and, when asked what they thought they needed the most work in, none of the female students checked reading. This is interesting since, on the CAT reading test, the females scored lower than the males and, also, lower than on any other subtest of the CAT.

Student Evaluation Findings

Data included in this section consist of: 1) case study student interviews conducted in December and February by NWREL staff, 2) pre and post use of a semantic differential, 3) Student End-of-Project Questionnaire, 4) performance record of projects and competencies completed by each student, 5) attendance data and grade point average (GPA) for EBCE and comparison group students, 6) the CAT basic skills data and 7) case study log summary.

Case Study Student Interviews

Six ninth grade migrant students were selected for the case studies out of the 17 enrolled in EBCE. Students were selected jointly by the evaluation and project director to include two students of above average ability, two of average ability and two of below average ability. One male and one female were selected from each of these three levels. Students were told the purpose for the interview, that their individual responses and opinions would be held confidential and that a summary of their collective responses would be given to the staff.

Interviews were conducted by two different Education and Work Program staff in December, 1978 and February, 1979. The first interview sought general information on the students' perceptions of the EBCE program and the types of activities in which they were engaged. The case study students reported entering EBCE for a variety of reasons, primarily to learn about jobs (four indicated this). They appeared to generally approve of the community site explorations and the individualized curriculum of EBCE.

In February Humberto Reyna, a NWREL staff member, made an evaluation site visit that included interviews with the six Mission Migrant EBCE case study students. Summarized below are Mr. Reyna's observations based on these interviews.

The focus for the February interviews was on students' perceptions of their responsibilities in EBCE, in the regular school program and at home. All the students seemed to have a good understanding of their responsibilities as students in general. Three of the students were not too interested in being in school; two felt that, if they had to be in school, they preferred EBCE and one student wanted out of EBCE so he wouldn't have to do anything at school.

There were a couple of contrasting things expressed by students regarding the difference between the EBCE program and the regular school:

- Students felt they had a choice in doing things in EBCE. They seemed to feel less restricted to ask questions about their work in EBCE.

- They felt that in both settings you had to do the work but in the regular class, if you did not do your work or assignments correctly, you just flunked and it was OK with the teacher. In EBCE you had to do it over and do it right.

- Students in EBCE felt responsible to help each other out at least by not bothering each other, while they felt little or no responsibility towards their classmates in regular classes.

- Students said that the only responsibility they had in regular classes was to do work and some didn't really feel obligated to do the assignments in their regular classes. However, they all felt they were required to complete their work in EBCE. It had to be done even if it meant they would have to miss going out to the community for awhile.

Semantic Differential

A semantic differential instrument developed by NWREL several years ago was used to evaluate any change in students' perceptions towards the concepts "me", "school", "work", "adults" and "learning." A paired t-test was run to determine if pre- and posttest scores were significantly different, and no significant differences were found. Students' scores increased somewhat on the concepts of "me" and "work" and decreased somewhat on the concepts of "school", "adults" and "learning".

Student End-of-Project Questionnaire

This questionnaire developed by NWREL was completed by 11 EBCE students in May. The purpose of the instrument was to obtain year-end data on certain questions asked of students when they entered EBCE to assess change in career preferences, if any, and the factors influencing such changes, to assess self-concept and perceived oral communication skills, to obtain student reflections on aspects of their EBCE experiences and to determine perceived strengths and weaknesses in the program.

As was true at the beginning of the school year, most of the EBCE students intend to be working full or part-time one year after completing high school. Nine of the 11 students in May indicated a plan to continue their education one or more years beyond high school although none planned to graduate from college.

In October 14 of the 17 students had never observed or worked at one of two jobs they felt they would like to hold after completing their education. In May only two of 11 students indicated they had never done so. Thus, EBCE gave students a chance to observe or work in potential career fields of interest that they otherwise would not have had the chance to do. In May, however, three of the 11 students indicated they did not know where to begin in preparing for and entering a job they would most like to hold after graduation, six said they had some idea, but only two felt the steps were quite clear. This pattern was quite similar to that in October thus suggesting students were not helped much in understanding how to prepare for a job of interest to them.

Five of the 11 students changed career preferences while in EBCE. Reasons for such changes were recognition of job hazards, inadequate pay and too much education required. Advice from someone who works at the job and/or experience in observing or trying out the job were the main factors that influenced a change.

When asked to rate the overall quality of the EBCE program, nine students rated it excellent or good and two gave it an average rating. None rated it poor. If they had to do it over again six would decide to participate

in EBCE. It provided more opportunity to learn about occupations than does the regular high school program. Eight students felt more motivated to learn in EBCE than in the regular high school program and none felt less motivated to learn.

In completing an open-ended question related to perceived strengths of their EBCE program, seven indicated career explorations opportunities, four identified new learning opportunities, two said the student-staff relationships and two said the program was generally good. In identifying weaknesses, seven said no weaknesses, two indicated specific expectations not met, one said the program has a special education reputation and one said he or she did not have enough time on competencies.

Performance Records

In addition to analyzing student pre- and posttest data, records were kept of the number of career explorations, competencies and projects completed by each student. EBCE students in the program for the full year were expected to complete eight career explorations, five competencies and eight projects. Students completed 97 percent of the expected explorations, 93 percent of the competencies and 91 percent of the projects.

Attendance/GPA

In comparing attendance records, there was no significant difference between the EBCE and comparison group (10 versus eight days respectively.) The few students with extensive absences this year had

causes beyond their control such as illness, death of a father or other family problems. Eight students were absent five days or less; seven were absent between six and 15 days and two were absent more than 15 days (32 and 42 respectively.)

Comparisons were made between the GPA of EBCE and comparison group students with the GPA for the prior year as a covariate. For the comparison group students their GPA remained constant (83.8 for last year and 83.3 for this year) while the GPA for EBCE students increased (from 79.8 last year to 83.3 for this year). The difference between the two groups was significant at the .10 level in favor of the EBCE students.

CAT Basic Skills

CAT scores were collected in April by the District in the areas of reading, language, math and reference skills. The Mission EBCE students ranged from the fifth to the fifty-ninth percentile across these four areas with the median being at the 25th percentile in reading, 28th percentile in language, 25th percentile in math and 40th percentile in reference skills. Data from a comparison group of students in ninth grade indicated the EBCE students were scoring lower on the basic skills. For a more realistic comparison, data between the two groups were compared with their standardized scores the prior year on the CAT. No significant differences or growth between the two groups were found. The comparison group scored higher on the pretest and retained that lead on the posttest.

Study Log Summary

The following comments summarize EBCE Student Case Study Logs for six students in the Mission Texas Migrant EBCE program. The Case Study Logs were recorded by the Mission program staff to reflect observations throughout the school year. The comments are intended to be general in nature, pointing to similarities and differences of the six students as a group rather than individually.

- At the beginning of the program none of the six students would initiate conversation nor were they comfortable in conversation with adults. They all improved their communications with adults although they are still working on improving.
- Most of the students improved in their decision-making skills and were willing to make decisions regarding their educational programming.
- The staff felt that all but one of the six students had improved in their basic skills development.
- All six students are planning to complete their high school education. This is important to note because of the high attrition rates for migrant youth nationally.
- None of the students have formulated a specific career they plan to pursue upon graduation. However some of the students have eliminated some careers after explorations took place.

Perceptions of Parents and Employers

Questionnaires were developed by NWREL and administered to parents of nine EBCE students and to 24 employers or community resource people.

In comparison with past school experiences of their son or daughter, two of the parents felt the EBCE experiences were better and seven felt they were much better. Eight of the nine parents, if they had to choose over again, would want their son or daughter to participate in EBCE while the remaining parent was uncertain. Of the eight parents responding to the

question all felt that they had received enough information about their son or daughter's progress in EBCE although three indicated they almost never had contact with any EBCE staff. All nine parents felt EBCE had helped their daughter or son form career plans and helped them learn about occupations. Eight of the nine parents felt that EBCE helped them more than the regular school program in their general learning and in motivating them to learn. The remaining parent felt the effects were about the same as the regular school program.

An important change noticed by parents was the frequency with which their son or daughter talked with them about what was going on in school or in EBCE. Before participating in EBCE only one parent reported their son or daughter talking almost daily about school. As a result of participating in EBCE, six parents reported that their daughter or son talked almost daily about what was going on in the EBCE program. This finding seems important since many people today express concern that parents and their teen-age children seldom communicate.

When asked to identify perceived strengths and weaknesses of the Migrant EBCE program the only weakness identified by more than a single parent was lack of a variety of job sites to meet students' interests (identified by three parents.) Strengths in EBCE checked by more than one parent were:

- Students learn about "real life" situations and responsibility (6 parents)
- Quality of staff (5)
- Students learn about a variety of careers (5)
- Experience in working with adults (5)

- Good alternative to a regular school program (4)
- Good way of getting students to learn (4)
- Individual treatment of students (4)

Positive changes noted in their son or daughter that they felt were a result of participating in EBCE were:

- Better able to relate to others (5)
- Greater self confidence (5)
- More realistic attitudes toward life, work etc. (5)
- Greater maturity or self-direction (4)
- Clearer direction about his/her future (4)
- More interest in education (4)
- Better understanding of jobs (4)
- Improvement in basic skills (3)

No negative changes were observed except for one parent who felt her son or daughter had become more critical of others. When asked what changes they would recommend in EBCE, four said none, one suggested more job sites, one better transportation for students and one the need for a good math teacher. In summary the parents felt quite positive about EBCE and their son or daughter's participation in the program.

An Employer Opinion Survey was completed and returned by 24 community resource persons. Employers reported spending an average of 17 hours per week with students at their site for career explorations and 23 hours per week with students on a learning level.

Ninety-six percent of the employers felt the EBCE staff provided them with enough information to help them direct student activities at their site and ninety-two percent would recommend to a potential employer or resource person that she or he become involved with the program.

One hundred percent of the employers indicated their plan to continue participating in the EBCE program next year. Reasons cited most frequently were 1) the program is worthwhile (67 percent), 2) my participation is a community service (50 percent) and 3) I like the people involved (25 percent.)

Strengths of EBCE cited by a quarter or more employers were:

- Students learn about a variety of careers (87 percent)
- Students learn about real life situations (63 percent)
- Experience in working with adults (54 percent)
- Good way of getting students to learn (46 percent)
- Good alternative to a regular high school program (42 percent)
- Quality of the staff (29 percent)

Weaknesses cited in EBCE by a quarter or more employers were:

- Students not receiving sufficient training (38 percent)
- Lack of feedback about students (29 percent)

On another section of the survey 46 percent of the employers said they never receive adequate feedback about what happens to the students after they leave the site and 33 percent indicated they never receive adequate feedback about the effectiveness of their work with students.

In summary three points stand out in employer responses:

- They are overwhelmingly supportive of the EBCE program and all plan to continue again next year.
- Participation in EBCE is seen as a way of helping students and not of reducing employers' workload.
- Employers want better feedback about their own effectiveness with students at their site and about what happens to these students after they leave the site.

Summary of Findings and Recommendations

Summary of Findings.

The statements that follow summarize findings from the first-year evaluation of the Mission Texas Migrant EBCE program.

- Mission Texas has initiated a high fidelity NWREL Experience-Based Career Education program designed to meet the needs of migrant youth. They have received training and technical assistance from NWREL to help implement their program.
- Interviews with EBCE case study students indicate that they feel they have greater choice, are more involved and have more responsibility in EBCE than in their regular school program.
- Students did not show a significant change in their attitudes toward the concepts of "me," "school," "work," "adults" or "learning" as measured by a semantic differential while in EBCE.
- On the student End-of-Project Questionnaire in May, only two of 10 students indicated they had never observed or worked at one or two jobs they said they would like to hold after completing their education. At the beginning of the program 14 of the 17 students indicated they had never done so. Thus EBCE gave students a chance to observe or work in potential careers of interest that they otherwise would not have had the chance to do. About half of the EBCE students changed career preferences as a result of participation in EBCE. In May, however, three of the 11 students indicated they did not know where to begin in preparing for and entering a job they would most like to hold after graduation, six said they had some idea, but only two felt the steps were quite clear. This pattern was quite similar to that in October thus suggesting that students were exposed to various careers but not helped much in understanding how to prepare for a job of interest to them.
- When asked to rate the overall quality of the EBCE program in May, nine students rated it excellent or good and two gave it an average rating. None rated it poor. Eight of 11 students felt more motivated to learn in EBCE than in the regular high school program and none felt less motivated to learn.

- A basic skills objective of the Mission EBCE project was that students would do at least as well as comparison group students even though they spent up to half of their time in the community. Pre- and posttest data indicated that, although the comparison group had higher scores at the beginning of the year, there was no significant difference in growth in scores between the two groups. In essence, students stayed at the same levels in basic skills throughout the year.

- EBCE students made a statistically significant gain in GPA over the prior year. It increased from 79.8 to 83.3.

- Students completed 97 percent of the required career explorations, 93 percent of the competencies and 91 percent of the student projects. This indicates that students were complying with the work expectations of the project.

- Parents felt quite positive about EBCE and their son or daughter's participation in the program. The only weakness in EBCE identified by more than a single parent (in this case by three parents out of nine) was lack of variety of job sites to meet students' interest. Strengths in EBCE identified by over half of the parents were: 1) students learn about "real life" situations and responsibility, 2) quality of staff, 3) students learn about a variety of careers and 4) students gain experience in working with adults. Positive changes noted by over half of the parents in their son or daughter that they felt were a result of participating in EBCE were 1) better able to relate to others, 2) greater self-confidence and 3) more realistic attitudes toward life and work. No negative changes were noted by more than a single parent.

- On the Employer Opinion Survey, of 24 employers, every one indicated they plan to continue participating in the EBCE program next year. Reasons cited most frequently were: 1) the program is worthwhile, 2) my participation is a community service and 3) I like the people involved. Strengths of EBCE cited by at least half of the employers were: 1) students learn about a variety of careers, 2) students learn about "real life" situations and 3) student experience in working with adults. Weaknesses in EBCE identified by a quarter or more employers were: 1) students not receiving sufficient training (38 percent) and 2) lack of feedback about students (29 percent.) Employers want better feedback about their own effectiveness with students at their site and about what happens to these students after they leave the site.

Recommendations

Based on the evaluation findings, the following recommendations are proposed:

- The first year of operating any innovative program is a learning experience for all involved. Based on the evaluator's experience with other first-year EBCE programs, the Mission Texas program got off to a rather good start and appears well organized and directed. Many of the students spoke with enthusiasm about their experiences in EBCE and there appears to be strong parent and employer support and some areas of important student growth. Based on these facts, the evaluator recommends the program be continued and expanded to more students next year.

- Since it is likely that students will again drop out of EBCE at various stages of the school year, it is recommended that the program recruit and enroll perhaps a twenty percent surplus over the load they could handle for each semester.

- Employers were strong in their support for EBCE and equally strong in their desire to receive better feedback about their own effectiveness with students at their site and about what happens to these students after they leave the site. Experience of staff at other EBCE sites suggests that verbal feedback to participating employers during the year about their work with students and any student changes related to these experiences is helpful. The feedback about what students do after leaving a site can sometimes be handled informally by staff during visits to employer sites and informally by students themselves dropping by or sending a note to a former employer at a learning level indicating the student's current and future plans and how these may have been influenced by that employer. Students can sometimes be motivated to do this by reminding them that maintaining a positive relationship with a former employer instructor can often help in obtaining a good letter of recommendation or making future employment contacts. The evaluator recommends that greater attention be given to the area of employer feedback next year.

SECTION V

ADAPTATION OF EBCE FOR GIFTED AND TALENTED STUDENTS

Status Report on Gifted Adaptations

The NWREL Gifted and Talented adaptation of EBCE has involved the technical assistance participation in the development plus evaluation of two models for junior high students. One model is the Exploring Careers in the Community for Gifted and Talented (ECC/GT) of the Jefferson County, Colorado school district. The program was in its second year of implementation. The second adaptation is the Learning in the Community (LINC) program in North Clackamas school district, Milwaukee, Oregon, which was in its first year of operation.

As may be seen from the synopses of these programs and their evaluation which follow, the programs are successful in attaining the career education outcomes which are principal goals of EBCE. The career education outcomes are attained to a large degree even in the LINC program which permitted students limited time in the community.

The area in which these programs are finding the greatest struggle is to consolidate a curriculum which responds uniquely to the needs of gifted and talented junior high students. Since this is an area of extreme importance in the political context of their districts, Education and Work Program staff anticipate substantial changes in the curriculum focus of both programs to attempt to better accommodate the particular needs of junior high gifted and talented students. Any such changes will be observed and documented during the 1979-80 school year.

The remainder of this section will include a synopsis of the evaluations for each of the pilot adaptations.

Evaluation Summary of the Jefferson County, Colorado Program

Description of the ECC/GT Program*

The Exploring Careers in the Community for Gifted and Talented (ECC/GT) program model is based on the Northwest Regional Educational Laboratory (NWREL) Experience-Based Career Education (EBCE) model, modified for use in Jefferson County as Exploring Careers in the Community (ECC) and then further adapted to meet the needs of gifted/talented students at both the junior and senior high levels. It is individualized and emphasizes experience-based, performance-based learning.

The ECC/GT program is designed as an eighteen week model; students spend partial days in two to five hour blocks scheduled into the program for one semester or two quarters. However, the model is intended to be flexible enough to allow incorporation into any school based on individual building needs and considerations. Students are awarded career education and academic credit, usually Language Arts and one other depending upon the subject area certification of teacher(s) involved.

The ECC/GT program is process as well as content oriented. A major emphasis is the development and application of higher level thinking skills and creative/divergent problem solving skills. These processes

*Adopted from "Program Description" by Nancy Tia Brown, ECC/GT Program Coordinator.

are practiced and applied through all of the learning strategies. Also, the development of independence, responsibility and time management/organization is fostered within the program.

Evaluation Design

The pre and posttest evaluation design for both junior and senior high student outcomes included students enrolled in ECC/GT at three schools and a group of non-ECC gifted and talented students as a comparison group. In the case of the junior high program, an additional group of students with high grade point averages in one of the schools were nominated but did not meet all of the criteria for the GT program. These students were nevertheless included in the same ECC/GT class with those students who were identified as gifted and talented since there was space available. This group of students served as an additional group with which to make comparisons.

Summary of Evaluation Findings: Student Outcomes

Students maintained their level in basic skills while participating in the ECC/GT program as measured by the Adult Performance Level test of functional literacy. To most districts it is of major concern that students not "lose ground" while participating in alternative types of programs.

On the Career Exploration subscale which is focused on career education goals, ECC/GT students showed statistically significant pre/post gains. In addition, some students reported an increase in how certain they felt about the steps required to prepare for and enter their chosen career.

Other attitudes assessed in the evaluation were self-concept, attitudes toward oral communication and self-reported sense of responsibility. Although not statistically significant, both the ECC/GT and the ECC students reported greater ease in oral communications following ECC/GT participation than did the GT comparison students. The other measures did not show differences between ECC/GT and GT comparison students.

Overall, students in ECC/GT not identified as GT performed as well or better than those formally selected on the outcome measures. This fact combined with low intercorrelations among the various student selection criteria suggest that the ECC/GT selection procedures have yet to be adequately refined.

Program Outcomes Summary

ECC/GT students found ECC most helpful in assisting them to learn how their interests and abilities fit into potential careers. Junior highs also found it expecially helpful in learning what to look at when considering a job. ECC comparison and ECC/GT students differed on the helpfulness of ECC in relating basic skills to potential careers with GT students rating the program higher in this area. The program was seen as least helpful in improving reading and math skills and in teaching an understanding of the democratic process. Both ECC/GT and ECC comparison students rated the program below average on the extent to which it allowed them to progress at their own rate.

Parents generally rated the program favorably but slightly lower than the previous year's ratings. Parents saw as program weaknesses a lack of

adequate variety of job sites and problems with organization or staffing. In addition, a substantial proportion (over 20 percent) of the ECC/GT parents were concerned with inadequate transportation, that participation in the program caused students to sacrifice other interests, that there was no opportunity to continue the program from junior to senior high, that some students cannot handle the relative freedom of ECC and that too difficult or too much work was required for some students. Except for the sacrifice of other interests, a lesser proportion of parents saw these same concerns this year as in the previous year's program.

Student Outcomes

- ECC/GT students maintained their basic skills level while participating in the program.
- ECC/GT students generally achieved the career education goals of the program.
- Participants' confidence in their use of oral communication is improved by the ECC/GT program
- There was no evidence to suggest that participants' self-confidence was enhanced more by participation in ECC/GT than in the regular GT programs.

Program Outcomes

- The ECC/GT program is seen as accomplishing the primary goals of helping students to explore and learn about a variety of careers and to understand the requirements of career entry.
- The junior high ECC/GT program was perceived by somewhat fewer parents and students as having difficulties than in the first year's evaluation. Areas continuing to need program attention include recruitment and orientation of community instructors, transportation to community sites, variety of community sites and amount of nonchallenging or repetitive "busy" work assigned students.

Recommendations

- The junior high ECC comparison group indicated somewhat different reasons for program participation and different benefits from the ECC/GT students. An examination of these differences by program staff and administration may allow further refinement of the GT model including curriculum more appropriately targeted to the GT student.

- Proposed changes in the objectives and curricula of ECC/GT for next year that will place more emphasis on the gifted aspects of the students will necessitate the refinement or development of new evaluation instruments. A two-year effort is recommended to try out these curriculum and evaluation modifications in 1979-80 and to verify them in 1980-81.

- Student selection procedures (for the junior high ECC/GT program) need revision based on analysis of the student selection criteria and staff comments.

- Keep the student interview process with little or no revisions since it a) produces high interjudge reliability, b) is measuring different dimensions than the teacher ratings or the modified Renzulli/Hartman and c) since at least the learning scale is a good predictor of oral communication.

- Keep the Otis-Lennon test since it could replace the student interview ratings on the learning dimension.

- Consider dropping the teacher ratings on the modified Renzulli/Hartman except for the task commitment dimension since the learning dimension is already covered by the Otis-Lennon and the dimensions except for task commitment are not good predictors of student outcome variables.

- For the 1980 evaluation of the junior high ECC/GT program a) revise the Jeffco ECC instruments, b) refine the ECC/GT Student Growth Survey scales and develop a similar instrument for use as a pre/post measure, c) eliminate Harter's Perceived Competence Scale and d) refine the postproject interviews to better target on critical thinking skills used.

Evaluation Summary of the North Clackamas, Oregon Program

Program Description.

The 1978-79 North Clackamas Learning in the Community (LINC) Junior High Gifted and Talented program operated on an eight-week period with students participating one full day per week. Students from each of the four junior high schools were involved and met together for the weekly LINC sessions. Program activities included small group and individual career explorations, student journals, individual and small group projects as well as large and small group activities in such areas as higher level thinking skills, critical thinking, group process and self-awareness.

Description of the Evaluation.

The first-year evaluation was primarily focused on program implementation and operation with student outcomes a secondary concern. During the first two years of a project, it is of primary importance to assess the feasibility of any new programmatic model. Thus, the evaluation design called for pre- and posttesting students on some outcome measures plus a survey of parents, interviews with employers and debriefing of staff to obtain information relative to program implementation. In addition, the evaluator and another NWREL staff member each made a site visit during the program's operation.

Results: Student Outcomes

Career Education. The Career Education outcomes were assessed primarily by asking students about their confidence in their ability to make career plans and implement them. Students initially were asked to list two jobs

they would like to hold after completing their education. Following LINC participation 46 percent of the students indicated they had observed or worked at both jobs listed, while only 20 percent had done so before. In addition, only 13 percent remained who had not observed or worked at either of the two preferred jobs, a reduction from 38 percent who had not done so previously. This suggests that a large proportion of the students were able to have at least one exploration which had personal relevance for them.

Students were then asked how sure they were of the steps necessary to prepare for and enter the job they most wanted. Initially, 31 percent felt the steps were "pretty clear" and 13 percent felt they were "quite clear", a total of 43 percent. Following participation in LINC, 53 percent thought the steps "pretty" clear and 22 percent "quite clear", a total of 75 percent and an increase of 32 percent.

Students then responded to a 25-item Career Exploration scale which asked them about how often they had considered or learned about various aspects of a preferred career. The total score increase for this scale was statistically significant at the .01 level.

Self-Concept. A 14-item self-concept scale was administered to LINC students on a pre/post basis in an attempt to tap affective changes which might be occurring in such a program. There were no pre/post differences. This is not surprising since the LINC program occurred over only an eight-week period and self-concept is not likely to change during such a short time.

Oral Communications. An oral communication attitudes scale was also administered pre/post and demonstrated no real change in students' ability to do such things as talk to adults, speak in public or make themselves clearly understood in a discussion. It may be hoped that such a scale would show positive changes in a longer LINC program.

Results: Program outcomes

Both students and parents were asked to rate the overall quality of the LINC Project and whether, if they had it to do over again, they would want to participate. The quality of the project received a mean rating of 3.94 from students and 3.69 from parents (on a scale from 1 to 5). The parent rating was not as high as the students' and not as high as might be preferred. However, when asked whether they would "do it again," the students' rating was 4.02 while the parents was 4.09. This suggests that the lower "overall" rating by parents was influenced by the feeling of many that the 1978-79 program had first-year "bugs" to be worked out.

Another area that both students and parents saw as needing attention was providing a greater variety of community sites for career exploration and projects. Fifty four percent of the parents indicated this was a weakness of the program.

A number of students were also concerned about the amount of paperwork involved in the LINC program. During the debriefing, staff members agreed that the Exploration Guides needed modification to lessen the student and staff paperwork.

Other concerns expressed by students, parents and staff primarily involved the time-configuration of the LINC project. The concerns were that there was an inadequate amount of time for explorations, projects and other activities. Also, there were conflicts and, in some cases, lower grades, which resulted from students having to miss one day a week of regular classes.

Conclusions

- Considering the limited program contact students made considerable progress in the career education objectives.
- Affective objectives were not measurably affected by the program.
- Parents, students, staff and community instructors were generally quite positive about the LINC program, while recognizing the need to make changes in the future. Areas which were indicated to be major strengths were the opportunity to get into and become aware of the "real world" and to learn about a variety of careers. Areas which were perceived to be program weaknesses were recruitment and orientation of a greater variety of community sites, advance information to students and parents concerning program goals and expectations, the amount of paperwork and the time-configuration of the program.
- Student selection criteria did not correlate well with each other or with the three outcome measures.

SECTION VI

OUT-OF-SCHOOL ADULT ADAPTATION

NWREL's out-of-school adult work focused around development and implementation of a pilot version of a program entitled "Career Redirections for Adults" (CRA). In this project, implemented at Western Nevada Community College (WNCC), Carson City, Nevada, persons participated in a multi-session self-analysis and planning set of activites supplemented by group counseling. Exploratory experience at community sites was included. The results of the evaluation of the program are summarized in this section.

The evaluation was designed primarily to obtain outcome data as well as bibliographic information to assist Education and Work staff in forming the basis for researching the needs of various categories of adults. Outcome data were obtained from administration of pre- and posttest questionnaires. In addition, the participant questionnaires sought feedback regarding the strengths and weaknesses of the CRA program. Only a small number of participants were involved in the evaluation (eight responded to both the pre- and posttest sections of the program evaluation questionnaire), which limits the generalizations that can be made.

Results

Three males and five females ranging in age from 19 thru 56 participated in the full evaluation. One half of the participants were married and had varied educational backgrounds. The outcome data were analyzed by

each of the biographical variables (i.e., gender, age group, marital status, education) and the greatest differentiation was attributable to gender. However, there were also differences evidenced by age group, which cannot be clearly distinguished from gender, since the youngest age group was composed of males only.

Due to the short duration of the program (two to three weeks)*, no pre- or postgains were seen in most of the outcome measures (Career Exploration, Self-Concept, Oral Communications Attitude, or the Semantic Differential concepts of Me, Work/Working, Learning, School/Training, Employers). Two exceptions were the two items directly asking participants about their ability to do career planning. Most participants reported a clearer idea of the steps to be taken in preparing for and entering a job. In addition, six (as opposed to three initially) of the eight ended the project feeling that they would be able to pursue the necessary steps in obtaining their desired positions.

The CRA program evaluation provided useful insights into the strengths and weaknesses of the pilot implementation. Participants found the career explorations and the career interest inventories to be the most useful career planning experiences. The group discussions in class were also perceived as useful and interesting. The program was rated overall as "very helpful" by five of the eight, "helpful" by one and "somewhat

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*When the evaluation was designed, it was anticipated that the program would operate as an open-entry, open-exit program, over a minimum time span of two to three months.

helpful" by one. There were no ratings of "of little help" or "no help at all." The most frequent suggestions for improvement were to lengthen the program and lessen the paperwork. The perception of "too much paper work" has resulted from the short period of time and the attempt to provide the full range of activities.

Conclusions

The results of this evaluation should encourage further revision and implementation of a more comprehensive and longer program. The following conclusions may be drawn from the WNCC data:

- Participants gained dramatically in confidence as to their ability to do career planning. This is a very encouraging finding for such a short-term effort.

- There appear to have been differences by gender and age groups in terms of many of the outcome variables studied. This tends to confirm the program's need to be individualized. These types of differences also suggest further study of demographic variables in the attempt to determine the areas in which adults with various characteristics have particular needs which should be addressed.

- Little pre/post change occurred on any of the outcome measures. This is not a surprising finding, since the program was of short duration. Based on this and comments by participants and staff, the CRA program should be lengthened to allow especially for individual career exploration and internships.

- Participants were generally enthusiastic about the CRA program and indicated they had benefited from a number of the career planning activities.

SECTION VII

EXPERIENTIAL LEARNING STUDIES

Status Report

As our Education and Work Program continues to adapt what we have learned from Experience-Based Career Education and other developments to fit the needs of special segments of youth and adults, it becomes increasingly important to conduct research on fundamental processes which underlie experiential learning. Such research is expected to contribute to basic knowledge about experiential learning processes and outcomes. At the same time, this research will provide answers of practical importance for educational practitioners, policy makers and for guiding the development and evaluation of new Education and Work components.

Our research activities this year have centered around four areas. The first is an updating of an earlier review of the literature on experiential learning to include recent studies from the past two years. The second is a survey of over 1000 EBCE students throughout the country to determine their perceptions of factors that distinguish excellent learning experience at employer sites from those factors that lead to little or no learning experience at such sites. The third area consisted of a preliminary look at the concept of responsibility as a developmental outcome of experiential education. The fourth study identified essential elements of experiential education programs and determined how these elements are present in three large scale experiential programs. To guide the direction of these activities, our Experiential Learning Review Panel, formed last year, was convened in San Francisco during the

American Educational Research Association Annual Meeting to review our plans and suggest improvements.

The review of the literature on experiential learning was prepared by Dr. Greg Druian, who has gained extensive experience in postsecondary service learning programs. This review focuses on (1) learner outcomes of experiential education, (2) differential effects on various learners and (3) the conditions that help create these outcomes.

The study of factors that distinguish excellent learning experiences for youth at employer sites from those leading to little or no learning experience was conducted by Tom Owens and Sharon Owen. This study, involving over 1000 EBCE students from 28 states, is a follow-up to a preliminary study conducted last year with 238 EBCE students. The results of this study are highlighted in the next section of this report. The results of last year's study have been shared nationally and have generated considerable interest. Presentations on the findings were made this year at the American Educational Research Association Conference in San Francisco in April, 1979 at the NWREL EBCE Conference in Vancouver, Washington in May, 1979 and informally at the Association for Experiential Education Conference in Portsmouth, New Hampshire in October, 1979. The article "Investigating Student Perceptions of Essential Elements of Experiential Education" was also printed in ERIC (ED 172 456) and published in a modified format in the Winter 1979 issue of Alternative Higher Education ("Enhancing the Quality of Community Learning Experiences"). An abstract of these findings has appeared in the Resources for Youth newsletter and in the AEE newsletter, Voyageur. Such

notices have led to our responding to over 200 letters from practitioners, researchers and policy analysts, requesting copies of the study.

The third study focusing on responsibility as a learner outcome of experiential education has lead us to explore the methodology of concept analysis as described by two philosophers, Robert Gowan of Cornell University and Thomas Green of Syracuse University. We have read their writings on this methodology and have conferred with each writer here in Portland this last summer, while they were serving as visiting scholars on the Research on Evaluation Project. An initial attempt was made in a session at the NWREL EBCE Conference to obtain from practitioners numerous examples of student behavior that staff felt reflected high or low levels of responsibility. This procedure was not too successful, because we failed to elicit an adequate number of examples of high level responsible behavior, although we collected numerous examples of non-responsible behavior. We have also used items from Dr. Diane Hedin's Responsibility Scale in our evaluation of one EBCE site and we are in the process of analyzing the data more carefully. An expanded study of this third area will be implemented in the coming year.

The fourth study, by Druian, Owens and Owen, focused on identifying and illustrating essential elements of experiential education programs. Three large scale experiential education programs were studied: Outward Bound, Foxfire and Experience-Based Career Education. After a tentative framework was developed at NWREL, staff at each of these programs were personally interviewed to discuss the extent of adaption potential of our

framework to their programs and to obtain change suggestions and actual examples of the essential elements as applied to their programs. A summary of the essential elements within nine dimensions of experiential education is shown in Table 1.

A draft report of this study was presented at the Association for Experiential Education Conference and critique was invited. So far we have received comments from about a dozen educators in the United States, Mexico and Canada. Based on their comments and our meetings to refine this study, we will be submitting a revised copy of this paper to the Journal of Experiential Education for publication consideration.

TABLE 1

PROPOSED ESSENTIAL ELEMENTS WITHIN
NINE DIMENSIONS OF EXPERIENTIAL EDUCATION

Program Dimensions	Essential Elements
1. Purpose	1. Purposes reflect learner needs 2. Purposes imply program content 3. Clearly shared and understood purposes
2. Setting	1. The setting is considered realistic or noncontrived by the learners 2. A physical and/or psychological challenge is provided by the setting 3. Some degree of low level risk exists 4. Diversity of settings are integrated
3. Participants' Characteristics	1. Voluntary participation 2. Diversity of participants
4. Learning Strategies	1. Relates to one or more theories of learning 2. Encourages young people to perform tasks normally permitted only adults in our society 3. Emphasizes a balance of action, reflection and application 4. Provides learning experiences that are individualized, sequential and developmental 5. Involves frequent structured interaction between student and instructor 6. Provides opportunities for unplanned learning from new experiences
5. Student Roles	1. Active student role in planning and carrying out activities 2. Chance to experience various roles (e.g., leader, team member, employee, tutor) 3. Assuming responsibilities for his/her actions 4. Opportunity to interact with various adults as well as with peers

TABLE 1
(Continued)

Program Dimensions	Essential Elements
6. Instructor Roles	1. Help students plan and carry out their activities 2. Role model as an active, involved learner 3. Monitor progress, assess and feed information back to students 4. Motivation and encouragement 5. Plan and implement a student accountability system 6. Skills in planning, empathy, communications and resource sharing
7. Outcomes of Learning Activities	1. Outcomes of learner activities are perceived as real and important by students and others 2. Students feel ownership for the outcomes
8. Management and Support Factors	1. Locating community resources for student learning 2. Forming positive relationships with external agents (such as may be needed in awarding regular school credit for program participation) 3. Obtaining funding and community support 4. Recruitment and selection of staff who are committed to using experiential learning strategies
9. Program Outcomes	1. Increased student self-confidence and ability to relate to others are common student outcomes 2. Staff and students are involved in assessing effectiveness of program 3. Openness to looking at both positive and negative outcomes and in examining areas for program improvement

Preliminary Findings from the Experiential Learning Questionnaire

To high school youth today, what distinguishes an excellent learning experience in the community from a "no learning" experience? What are the characteristics they associate with excellent learning experiences? What happens at such places that contributes to an excellent learning experience? What do youth learn through such experiences? What characteristics are associated with a "no learning" experience in the community? What might be done to improve the situation? Do young people's perceptions of excellent and poor learning experiences differ depending on a person's sex, ethnic background, grade level, academic ability, occupational preference or length of time spent in an experiential program? These appear to be important questions to address if we in experiential education are going to improve learning opportunities for young people.

In an effort to provide answers to the above questions an exploratory study was designed and conducted in the spring of 1978 by the Education and Work Program at the Northwest Regional Educational Laboratory (NWREL) in Portland, Oregon. Over the past seven years our Laboratory, in conjunction with the National Institute of Education and three other regional laboratories, has been heavily involved in developing and validating an experiential education program called Experience-Based Career Education (EBCE). EBCE provides secondary students with a vital alternative educational program that integrates academic learning, career experiences and life skill development through direct, supervised

learning experiences in the community. As a result of experience gained over seven years in developing and disseminating EBCE throughout the United States, NWREL is currently involved in adapting some of these concepts to special populations such as gifted and talented junior high school students, migrant youth, disadvantaged youth and adults involved in midcareer changes.

A review of the literature on experiential learning convinced us that a foundation exists upon which to design a useful study. John Dewey has pointed out that not all experiences are learning experiences. Combs et al (1971), Geiger (1978) and others have identified factors which may cause some experiences to be low in learning potential. Bandura (1977) and others writing about Social Learning Theory have also identified factors reported to be related to increased learning such as modeling and reinforcement. Using Flanders' critical incidents technique, open-ended questions and rating scales based on propositions derived from various theories on Experiential Learning, a questionnaire was designed, pilot tested and revised.

The 1978 Experiential Learning Questionnaire was administered to 218 students in eight EBCE programs covering five states--Alaska, Georgia, Michigan, Oregon and Washington. The EBCE students were used as the sample for this study since each student is usually involved in career explorations or learning levels at three to six community sites. Thus the same students would have been exposed to various sites and would be in a good position to assess qualities associated with locations providing excellent or poor learning experiences.

The findings from this preliminary study were presented at the annual conference of the American Educational Research Association, and elsewhere in a paper by Tom Owens and Sharon Owen titled "Investigating Student Perception of Essential Elements of Experiential Education" ERIC (ED 172 456). Reference to this article in the Resources for Youth newsletter and the Voyager newsletter of the Association for Experiential Education led to over 200 requests for copies of the study from researchers and practitioners.

Findings from the 1978 study were interesting enough to lead us to want to expand our study. Conceptually we decided to incorporate item responses that represent propositions derived from attribution theory. Briefly, "attribution theory" is a term given to various theories concerned with the problem of investigating causal perception (Bar-tal, 1978). Factors borrowed from this theory for our instrument include ability, effort, task difficulty and luck.

Other changes made in the 1979 study were to expand the number of surveyed EBCE student participants to over 1,000, to use a sample of high fidelity EBCE sites representing all four Laboratories' versions of EBCE (Appalachia Regional Educational Laboratory, Far West Laboratory for Research and Development, Northwest Regional Educational Lasboratory, and Research for Better Schools), to include sites with substantial minority student enrollment, and to select sites that provided a balance of geographic locations throughout the United States. The distribution of students by geographic area is shown in Table 2.

TABLE 2

DISTRIBUTION OF RESPONDENTS BY REGIONS OF THE U.S.

Region	Percentages
South and Southeast . . .	45.1
West.	27.4
East.	20.2
Midwest	7.3

Of the 1,104 student respondents in this study, 42 percent were male, 54 percent were female and four percent did not indicate. Ethnically, 62 percent were white, 17 percent were black, ten percent were Hispanic, four percent were native American, one percent were Asian and seven percent did not indicate. Grade-wise, 44 percent were seniors, 36 percent were juniors, 15 percent were sophomores and one percent were ninth graders. When asked to indicate their overall grade point averages for last year, ten percent received mostly A's, 21 percent received mostly B's, 36 percent received mostly B's and C's, 23 percent received mostly C's, four percent received mostly D's and F's and six percent did not specify. On the basis of the above statistics we feel the study represents a good cross section of American senior high youth.

When asked what specific careers respondents were most likely to enter after completing their educations, their open-ended responses were categorized by John Holland's six classifications and also on Hollingshead's scale of socioeconomic status as shown in Tables 3 and 4. The largest proportions of respondents preferred realistic or social occupations. This is typical of the American high school population. Career preferences were widely distributed across all seven levels of socioeconomic status.

TABLE 3

CLASSIFICATION OF RESPONDENTS' JOB PREFERENCES BY HOLLAND'S SIX CATEGORIES

Classification	Example	Percentages of Respondents
Realistic	electrician, mechanical engineer, maid	18.6
Social	teacher, dental hygienist	21.8
Artistic	drama coach, editor, writer artist	6.0
Investigative	chemist, computer programmer	10.2
Conventional	file clerk, teller, accountant	8.8
Enterprising	real estate salesperson, contractor	8.7

TABLE 4

CLASSIFICATION OF RESPONDENTS' JOB PREFERENCES BY HOLLINGSHEAD'S LEVELS OF SOCIOECONOMIC STATUS

Classification	Percentage of Respondents
Higher Executives.	8.7
Business Managers.	17.9
Administrative Personnel	13.0
Clerical and Sales Workers	12.9
Skilled Manual Employees	18.8
Semi-skilled Employees	1.8
Unskilled Employees.	0.2

Students in this study were asked to "think about the learning experience in the community this year that helped you learn the most about yourself, your relationships with other people or about a career of interest to you." In response to an open-ended question asking, "What did you learn?," the majority of respondents described specific job skills (63 percent), job procedures (27 percent) or the use of special tools or equipment (26 percent). Table 5 shows responses for the sites where they reported learning the most and where they learned the least.

Students were next asked, "What things happened at the site that made it an excellent learning experience?" Table 6 indicates that "working with helpful people" (37 percent) and "learning to actually do specific skills" (23 percent) were given most frequently by respondents.

A list of 19 possible reasons that may help make a particular community experience an excellent learning opportunity for a student was presented. Students were asked to decide how important each possible reason was, in their case, and to circle a number from 5 (extremely important) to 1 (not important) indicating the level of importance. Students were asked to select not more than six reasons they felt were extremely important to encourage them to discriminate in their judgments. Table 7 lists the reasons selected in order of perceived importance. The results are quite consistent with those obtained from the open-ended questions. "High effort by me," "trying out the work myself" and "my skill in getting along with people" were listed as most important, while "easy tasks" was listed as least important. This latter category was used because prior research indicated that easy tasks were not related to quality learning opportunities. The results of this study

TABLE 5

PERCENTAGES OF RESPONDENTS DESCRIBING
SPECIFIC THINGS THEY LEARNED THE MOST AND LEAST
AT THE LEARNING SITE

Most Learning Site	Percentages of Respondents
Job specific skills other than use of tools or equipment.	63.2
How the job works; specific procedures.	27.2
Use of tools/equipment.	26.0
Understanding of others.	16.0
Responsibility/maturity involved in that job.	11.2
Understanding of myself/my own interests.	8.8
How to work with people.	6.3

* * * * * *

Least Learning Site	Percentages of Respondents
Job specific skills other than use of tools or equipment.	32.6
Nothing I didn't already know/irrelevant things.	30.2
How the job works; specific procedures.	17.1
Use of tools/equipment.	13.5
Understanding of myself/my own interests.	6.4
Understanding of others.	4.8
Responsibility/maturity involved in that job.	4.5

TABLE 6

PERCENTAGES OF RESPONDENTS DESCRIBING WHAT THINGS OCCURRED AT THE SITES WHERE THEY LEARNED THE MOST AND LEAST

Most Learning Site	Percentages of Respondents
Worked with friendly/helpful people.	37.0
I learned to do job specific skills myself.	23.0
I had fun/liked being there.	12.2
Resource persons demonstrated; explained clearly. . . .	8.8
I learned about the nature/responsitiblities of the job.	7.3
I was given responsibility and liked it.	6.6
The people liked/accepted me.	5.1
I was shown job specific skills.	4.0

* * * * * *

Least Learning Site	Percentages of Respondents
I had nothing/irrelevant tasks to do.	32.3
I learned nothing/nothing was explained.	19.6
The work was boring.	13.8
I did not like the people/they did not like me/ want me around.	10.2
I was critized/ignored/discouraged.	6.6
I had no talent for/interest in this job.	4.8

TABLE 7

RESPONDENTS' PERCEPTIONS OF THE IMPORTANCE OF VARIOUS REASONS FOR A PARTICULAR COMMUNITY EXPERIENCE BEING AN EXCELLENT LEARNING OPPORTUNITY

	Reasons	Mean*	S.D.*
1.	High effort by myself	4.31	0.84
2.	Trying out the work myself	4.31	0.83
3.	My skill in getting along with people	4.30	0.87
4.	Applying the learning to new things	4.15	0.87
5.	Being given an adult responsibility	4.14	0.89
6.	Listening and talking with adults at the site	4.14	0.91
7.	Clear directions to follow.	4.09	0.87
8.	Adult encouraging for doing the tasks well.	4.01	1.00
9.	Observing skilled adults doing certan tasks	3.98	0.87
10.	Challenging tasks	3.96	0.91
11.	Adequate amount of time at site	3.90	0.99
12.	Learning the technical words and language associated with a career.	3.88	0.93
13.	Knowing ahead of time what will be expected of me	3.85	1.07
14.	Freedom to explore areas not planned in advance	3.82	1.00
15.	Supervisor took a personal interest in me	3.81	1.06
16.	Encouragement from family or friends.	3.67	1.14
17.	Luck in locating a good site	3.61	1.16
18.	Close adult supervision	2.93	1.21
19.	Easy tasks	2.80	1.23

*Figures are based on a five-point rating scale from extremely significant = 5 to not significant = 1.

confirmed that finding. Other tasks were based on propositions derived from social learning theory, attribution theory, the writings of Dewey and six years of experience in evaluating EBCE.

Students were asked regarding both high and low learning sites how many people they worked with and how many hours they spent at the sites. Table 8 shows the results. Students at high learning sites worked with twice as many people and spent twice the number of hours there as they did at low learning sites. Eighty six-percent of the respondents felt they developed really good relationships with persons at high learning sites, whereas only 23 percent felt that this had occurred at low learning sites. Students were next asked some specific questions in relation to the persons at the site with whom they formed good relationships. Table 9 shows the results. In general, respondents agreed strongly with the statements regarding relationships at high learning sites and agreed less with statements regarding relationships at low learning sites.

The focus for the questionnaire then shifted. Students were asked to think about the community experiences this year that were the worst for providing them with little or no learning.

In answer to the question, "What things happened at a site to make it a 'no learning' experience?" The most frequent reason given by respondents was that they had "nothing" to do or irrelevant tasks to accomplish. A list of 19 possible reasons that may have caused a particular community experience to result in little or no learning by a student was

TABLE 8

AVERAGE NUMBER OF PEOPLE RESPONDENT WORKED CLOSELY WITH AND TOTAL HOURS SPENT AT SITES

	MOST Learning Sites	LEAST Learning Sites
Average number of people worked with at the site (VERIFY)	5.76	2.82
Average hours spent there	41.74	21.99

TABLE 9

RESPONDNTS' AGREEING OR DISAGREEING WITH STATEMENTS CONCERNING A PERSON WITH WHOM HE OR SHE FORMED A GOOD RELATIONSHIP

	MOST Learning Sites		LEAST Learning Sites	
	Mean*	S.D.*	Mean*	S.D.*
We liked each other.	1.67	0.63	2.05	0.92
That person and I talked about things other than work--like sports, hobbies and personal thoughts.	1.82	0.93	2.32	1.24
That person respected and trusted me.	1.64	0.70	2.17	0.99
That person and I talked about my future plans.	1.81	0.97	2.49	1.26
That person and I talked about what was happening at the site.	1.56	0.76	2.13	1.16

* These Means and Standard Deviations (S.D.'s) are based on a five point rating scale where 1 = strongly agree, 2 = agree, 3 = not sure, 4 = disagree and 5 = strongly disagree. Therefore, a Mean of 1.67 indicates most people agreed or strongly agreed with the statements.

presented. Students were asked to decide how significant each experience was in keeping them from learning by circling a number from 5 (extremely significant) to 1 (not significant). Students were again asked to select not more thasn six reasons they felt were extremely significant. Table 10 lists the reasons selected in order of perceived significance. Reasons given the highest ratings were boring tasks, no opportunity to explore other areas of interest or to apply the learning to new things, and no opportunity to personally try out the work. Again there is verification that the level of difficulty of a task is not a major deterrent to learning.

Students were asked, in open-ended questions, to describe what they actually did at the site at which they learned the most and at the site at which they learned the least. Responses were content-analyzed by a NWREL consultant, and coded as high, moderate or low in level of responsibility. Tasks considered high in responsibility were those generally requiring some training and in which the consequences of failure would have caused some harm to the job site. Examples included supervising others, dealing directly with the public or performing a technical service where high quality was essential.

Tasks considered low in responsibility were those generally requiring little or no training and in which failure to perform them would not have caused serious harm to the site. Examples included sweeping the floor, cleaning off tables, etc.

TABLE 10

RESPONDENTS' PERCEPTIONS OF THE SIGNIFICANCE OF WHY CERTAIN COMMUNITY EXPERIENCES RESULTED IN LITTLE OR NO LEARNING

Reasons	Mean*	S.D.*
1. Boring tasks	3.60	1.36
2. No opportunity to apply the learning to new things	3.29	1.31
3. No opportunity to explore other areas of interest	3.29	1.40
4. No opportunity to try out the work myself	3.27	1.47
5. Too much repetition of the activity	3.20	1.32
6. Didn't know what would be expected of me	3.03	1.31
7. No opportunities to observe skilled adults doing the tasks	3.00	1.42
8. No opportunity to talk to adults at the site	2.93	1.41
9. No adult recognition for doing the tasks well	2.88	1.36
10. No opportunity to discuss my experience with others	2.87	1.34
11. Ignored my supervisor	2.76	1.47
12. Lack of clear directions to follow	2.72	1.37
13. Too closely supervised	2.60	1.29
14. Back luck at the site	2.59	1.40
15. Not enough time at site	2.54	1.44
16. Adult criticism of me or my work	2.46	1.35
17. Little effort by me	2.42	1.35
18. My lack of skill in getting along with people	2.36	1.39
19. Discouragement by family or friends	2.22	1.38
20. Tasks were too difficult	2.10	1.33

* Figures are based on a five-point rating scale from extremely significant = 5 to not significant = 1.

Table 11 shows the percentages of individual responses, judged as high, medium or low in responsibility at sites where respondents learned the most or least. (Total percentages can exceed 100 percent since respondents could list more than one task.) As Table 11 indicates, 34 percent of the tasks were judged to have a high responsibility level in the high learning site, as opposed to only 12 percent in the low learning site. The greatest differences, however, are evident for those tasks judged as requiring a moderate level of responsibility. For the high learning site, 87 percent of the tasks were judged to have a moderate level of responsibility, as opposed to only 30 percent at the least learning site. Conversely, respondents performed a somewhat greater proportion of low responsibility tasks at the low learning site. These data support our hypothesis, based on EBCE evaluation experience, that respondents learn more when permitted to do tasks they and others perceive as important.

In the remaining analyses of these data to be done by NWREL, we will examine differences in respondent perceptions according to their sex, ethnic backgrounds, grade point averages and career preferences.

Summary

At sites judged by respondents as providing rich learning experiences—

- Respondents more often learn job specific sksills, including use of tools or equipment and gain specific knowledge of how the job operates through hands-on experiences.

TABLE 11

JUDGMENT OF RESPONSIBILITY LEVELS FOR TASKS PERFORMED AT SITES WHERE STUDENTS LEARNED THE MOST AND THE LEAST

	Percentages of Respondents' Reactions:	
	MOST	LEAST
Tasks judged by consultant as:	Learning Sites	Learning Sites
High Level of Responsibility	33.6	12.4
Moderate Level of Rsponsibility	86.7	29.5
Low Level of Responsibility	38.1	43.2

- Respondents more often describe the people they work with as helpful and friendly.

- Respondents generally work closely with more than one person and form a good close personal relationship with at least one person with whom they work closely.

- Tasks done by students are more often judged to have high or moderate levels of responsibility and are perceived by students to be challenging.

At sites judged by respondents as providing little or no learning experiences--

- Respondents learned the same things as at high learning sites, but such learning was reported by only half as many students as was reported for high learning sites.

- One third of the respondents reported having no tasks to do, or only irrelevant ones.

- On the average, respondents spent only half as much time as at high learning sites.

- Respondents attributed little or no learning to boring tasks, and no opportunities to apply learning to new things, to explore other areas of interest or to try out the work themselves.

Implications

These data suggest some ways in which experiential education programs should be operated in order to maximize the community learning experiences. The implications are grouped as they affect program design, the role of the community resource person and future research.

Program Design Implications

- Individualized tasks that are planned for and with young people should be sufficiently difficult to challenge them. Tasks perceived as too easy seem to "turn off" students.

- Young people are generally ready and anxious for mature, adult responsibilities. They need to be aware of the consequences of

their actions and to accept both positive and negative outcomes. Activities at both the community site and on campus need to be designed to foster student responsibility.

- Although students want clear directions to follow they also need freedom to explore areas not planned in advance.

- Students rate hands-on learning as a very important factor in an excellent learning opportunity. Program staff need to remind themselves and community representatives of the importance of this feature and to build it into as many facets of the curriculum as possible.

- Opportunities should be provided for students to work closely with and form a good relationship(s) with one or several individuals in the community.

- Program staff may want to do some systematic group counseling with students regarding their reactions to boring and repetitious tasks. Even the most exciting jobs involve some boring tasks and young people need to recognize this and learn to cope with such aspects of a job.

Community Resource Persons

- Participating employers or community resource persons need to provide students with accurate knowledge of what is expected and yet provide opportunities for learning things not planned in advance.

- Students believe excellent learning opportunities are facilitated when community resource people encourage doing tasks well and demonstrate personal interest in them.

- Community resource persons should be aware that most young people are anxious for hands-on experience and the opportunity to assume adult responsibilities. Within legal and safety restrictions, community resource persons should aim to provide such experiences.

Future Research

- This study has investigated student perceptions of characteristics that differentiate excellent from poor learning experiences in the community. Diane Hedin and Dan Conrad (1979) have found students in various experiential educational programs expressing the belief that many of the same factors we found to be associated with excellent learning experiences, are outcomes being realized through participation in their service learning programs. This suggests that next steps include development of explicit descriptions of how these factors, such as

responsibility, occur in various experiential education programs. These descriptions can lead to a clearer understanding of what is involved in concepts such as responsibility and to develop alternate ways to increase a sense of responsibility in young people.

- As future empirical studies of this type are conducted, the results should be reviewed and synthesized. This would provide a stronger base for improving the practice of experiential education as well as for refining underlying theories such as the social learning theory.

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